Philippines. Inter-departmental task force for a continuing evaluatio
and updating of the four-year development plan.

FOUR-YEAR DEVELOPMENT PLAN

FY 1972-75

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(Adopted by the National Economic Council)

23 July 1971

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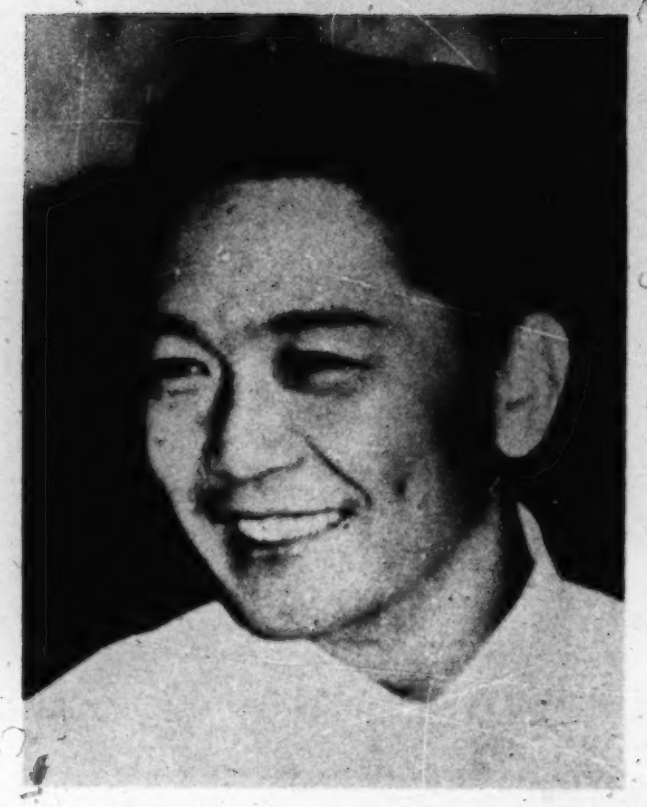
Malacañang



MESSAGE

I am proud to present to you this Four-Year Development Plan for the period FY 1972-75.

Being a public document committing the total government machinery and resources to specific objectives and growth targets, the Plan must insure that new and relevant developments in the economy which may backdate some of the original assumptions are taken into account, because only this will guarantee its continued workability and meaningfulness. Accordingly, the Development Plan for FY 1971-74 has been rolled over to FY 1972-75.

In view of the more recent perspective of economic performance, higher growth targets have been set for the next four years. The Plan, therefore, manifests the renewed sense of optimism and confidence obtaining from the high realization quotient of previous plans.

The effort towards sustained economic growth and development demands the support of every Filipino. On this occasion, I call for that support, for together, the road towards economic growth and development cannot be long and difficult.

10-8-72 1 (BS)

NATIONAL ECONOMIC COUNCIL
REPUBLIC OF THE PHILIPPINES
MANILA

FOREWORD

Planning is a continuous process. As such, the Four-Year Development Plan for FY 1972-75 must not be construed as a new and different plan but rather as a natural continuation of the Development Plan for FY 1971-74. The concept of a four-year rolling plan provides the significant advantage of being able to adjust to more recent developments not only in the domestic but also in the international economy. Thus, it becomes more helpful in guiding the general direction of development which is the essence of planning. Furthermore, it makes possible a more comprehensive evaluation of economic performance in relation to the Plan and the incorporation of improvements in the methodology of identifying or specifying the important relationships in the economy.

Like its predecessor, the Plan for FY 1972-75 involved the active participation of the entire government machinery constituted as the Inter-Departmental Task Force to revise the Four-Year Plan as created by the President. In this manner, the maximum possible coordination is assured not only in the planning process but also in the Plan's implementation, which is, of course, more important.

This Plan was adopted by the National Economic Council on July 23, 1971.

GERARDO P. SICAT
Chairman

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An Overview

STATUTE MILES

0 50 100 150 200

N

BATANES

ILOCOS NORTE
LAOAG
CAGAYAN
VIGAN
ABRA
BANGUED
TUGUEGARAO
BONTOC
ILOCOS SUR
MOUNTAIN
ILAGAN
ISABELA
SAN FERNANDO
LA UNION
BAGUIO
BAYOMBONG
NUEVA VIZCAYA
PANGASINAN
CABANATUAN
PARLAC?
NUEVA ECIJA
TARLAC
IBA
ZAMBALES
SAN FERNANDO
PAMPANGA
BULACAN
BALOES
BATAAN
RIZAL
MANILA
PASIG
QUEZON
CAVITE
STA CRUZ
LAGUNA
BATANGAS
LUCENA
CAMARINES NORTE
DAET
CAMARINES SUR
CATANDUANES
VIRAC
NAGA
MARINDUQUE
CALAPAN
MAMBURAO
ALBAY
LEGASPI
SORSOGON
MINDORO OCCIDENTAL
MINDORO ORIENTAL
ROMBLON
ROMBLON
MASBATE
MASBATE
CATARMAN
NORTHERN SAMAR
SAMAR
CATBALOGAN
BORONGAN
EASTERN SAMAR
AKLAN
CAPIZ
ANTIQUE
ILOILO
TACLOBAN
LEYTE
SOUTHERN LEYTE
NEGROS OCC
NEGROS OR
CEBU
CEBU
BOHOL
TAGBILARAN
SURIGAO
SURIGAO DEL NORTE
DUMAGUETE
AGUSAN
SURIGAO DEL SUR
MISAMIS ORIENTAL
BUTUAN
CAGAYAN DE ORO
MISAMIS OCC
DIPOLOG
ZAMBOANGA DEL NORTE
MALAYBALAY
BUKIDNON
LANAO DE NORTE
LANAO DEL SUR
DAVAO
DAVAO ORIENTAL
COTABATO
DAVAO
ZAMBOANGA DEL SUR
COTABATO
SOUTH COTABATO
SOUTH DAVAO
PALAWAN
PUERTO PRINCESA
JOLO
SULU

MAP OF THE PHILIPPINES

An Overview

1. ACCOMPLISHMENT RECORD OF DEVELOPMENT PLANNING, FY 1970 AND FY 1971

Comparisons reveal that in the last two fiscal years actual achievements surpassed most planned targets.

A. Expenditures on Domestic Product

Actual aggregate expenditures (expressed as GNP) for the two fiscal years consistently overshot plan projections by over 7 per cent (₱31.3 billion vs. ₱29.2 billion for FY 1970; and ₱33.0 billion vs. ₱30.5 billion for FY 1971).

This developed as aggregate economic growth achieved faster rates than originally envisioned (see Table 1), owing partly to a larger realized consumption (12.4 and 13.2 per cent higher in FY 1970 and FY 1971, respectively) and partly to a greater investment level (15.0 and 3.4 per cent more in FY 1970 and FY 1971, respectively) which was buoyed up by surprisingly high private capital formation that more than offset the low public component.

B. Sectoral Production

Likewise, actual aggregate domestic production (see NDP figures in Table 2) exceeded earlier anticipations by around 6 per cent in the last two fiscal years.

This occurred even as realized output in agriculture (once) and mining (twice) fell short of planned targets (for agriculture, .6 per cent in FY 1971; for mining, 13.4 per cent in FY 1970 and 18.5 per cent in FY 1971).

The low realization quotient in recent agricultural targets may reflect the undue emphasis of previous plans on traditional sectors, leading to over-expectations there. This is a case where new technical economic refinements should improve on former approaches and attitudes.

The FY 1971 deviation was due not only to these reasons of over-expectation but also to an unforeseen wave of vicious typhoons that caused widespread agricultural destruction in late 1970.

In spite of this, however, the rate of manufacturing output picked up much more rapidly than originally envisaged, consequently leading to higher performance levels for both years (up by 21.3 per cent in FY 1970 and 25.1 per cent in FY 1971).

For the residual sectors combined, the deviation of actual output from predictions followed a similar upward direction (4.8 and 5.6 per cent higher for FY 1970 and FY 1971, respectively).

C. Foreign Trade

In the external sector, export achievement in FY 1970 lagged just .3 per cent behind the targeted level (U.S. $932 million vs. U.S. $935 million). FY 1971., however, turned the tables when actual exports (U.S. $1,118.0 million) overtook projections (U.S. $995 million) by a 12.4 per cent margin as producers responded more fully to the foreign exchange incentives (see Table 3).

In imports, the projected decrease for FY 1970 did not materialize, as actual value exceeded the target level by .8 per cent (U.S. $1,104 million vs. U.S. $1,095 million). In FY 1971, during which imports were expected to maintain the FY 1970 projection, imports actually increased slightly to U.S. $1,099.5 million.

One may, therefore, describe actual overall accomplishment as highly favorable in relation to planned targets in spite of damaging weather conditions. This suggests that development plans have on the whole remained realistic in approximating future economic behavior. More important, they have been successful in guiding the general directions of the economy, which is the very function of planning.

2. DIGEST OF THE FOUR-YEAR DEVELOPMENT PLAN, FY 1972-75

The following is a summary of the Four-Year Development Plan covering the period FY 1972-FY 1975. This Plan was prepared by an Inter-Departmental Task Force under the Chairman of the National Economic Council; it revises the Four-Year Plan for FY 1971-FY 1974 in accordance with the concept of a four-year rolling plan.

A. Objectives

The ultimate goal of the Plan continues to be sustained economic prosperity; specifically, the long-run plan objectives are: higher per capita income, greater employment, more equitable income distribution, internal stability, and regional industrialization and development. To enhance the attainment of these objectives,

Table 1—GROSS NATIONAL PRODUCT, CONSUMPTION AND INVESTMENT
FY 1970-71 (In million pesos at 1967 prices)

	(1) PLANNED FY 1970	(2) ACTUAL FY 1970	ACTUAL AS PER CENT OF PLANNED TARGETS* (2)/(1)	(3) PLANNED FY 1971	(4) ACTUAL FY 1971	ACTUAL AS PER CENT OF PLANNED TARGETS* (4)/(3)
1. Gross National Product	29,172	31,320	107.4	30,485	33,042	108.4
	5.0	6.4		4.5	5.5	
2. Consumption	24,056	27,045	112.4	24,741	28,015	113.2
	3.9	4.8		2.8	3.6	
a. Public	2,880	3,038	105.5	2,725	2,835	104.0
	8.0	6.8		(5.4)	(6.7)	
b. Private	21,176	24,007	113.4	22,016	25,180	114.4
	3.4	4.5		4.0	4.9	
3. Gross Domestic Investment	6,120	7,041	115.0	6,456	6,678	103.4
	(3.2)	11.9		5.5	(5.2)	
	857	682	79.6	938	455	48.5
a. Public	35.4	13.1		9.5	(33.3)	
b. Private	5,263	6,359	120.8	5,518	6,223	112.8
	(7.5)	11.7		4.8	(2.1)	

* This means that the actual accomplishments are evaluated in relation to the planned targets. 100 means that actual performance exactly matches targes; less than 100 implies under-attainment and greater than 100, over-attainment.

N. B. Numbers indicated below the absolute values are growth rates.

Figure 1

EXPENDITURE AND SECTOR ORIGIN OF PRODUCT
FY 1970 AND FY 1971
(In million pesos at 1967 prices)

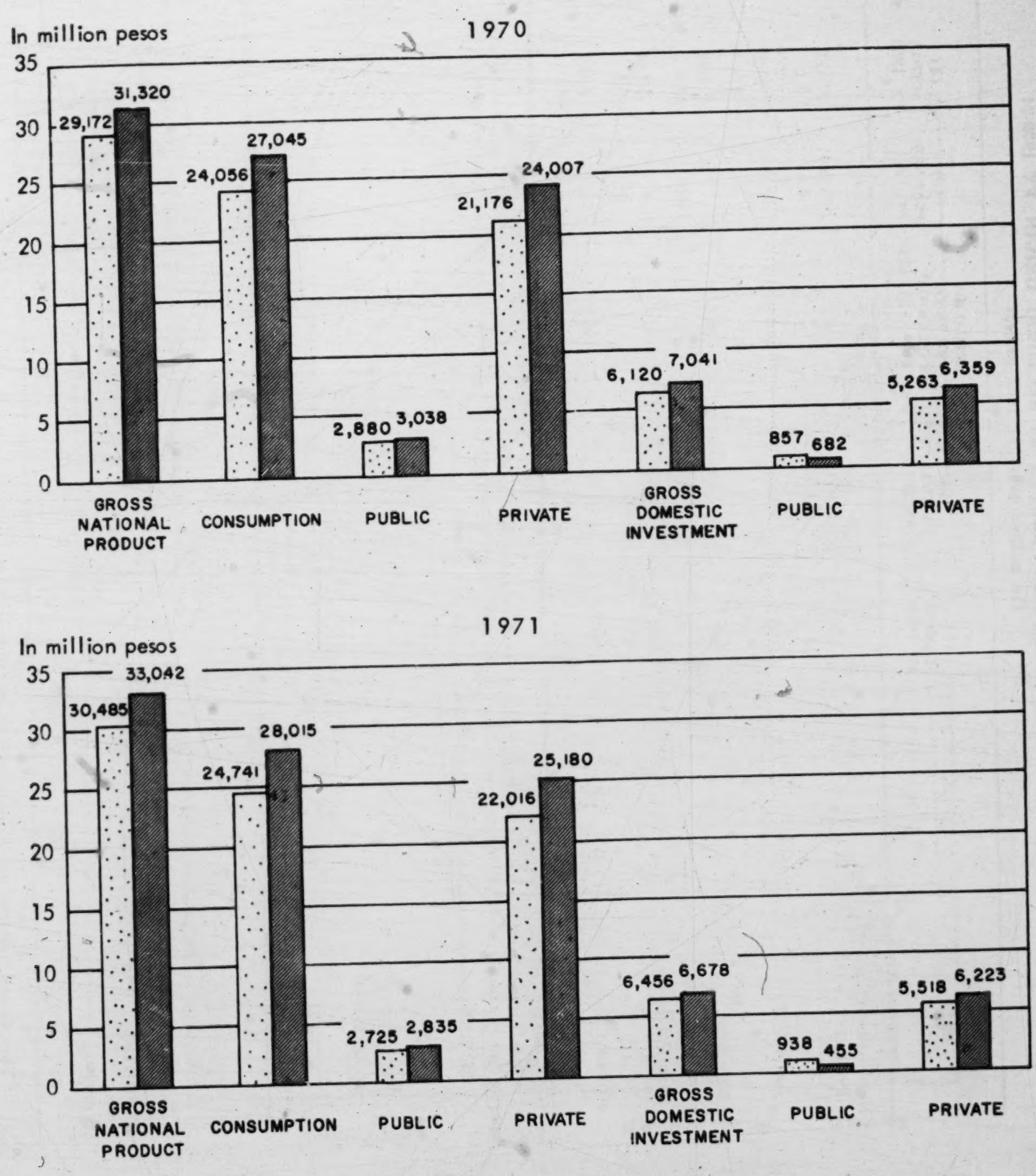


Table 2—NET DOMESTIC PRODUCT BY SECTORAL ORIGIN, FY 1970-71
(In million pesos at 1967 prices)

	(1) PLANNED FY 1970	(2) ACTUAL FY 1970	ACTUAL AS PER CENT OF PLANNED TARGETS* (2)/(1)	(3) PLANNED FY 1971	(4) ACTUAL FY 1971	ACTUAL AS PER CENT OF PLANNED TARGETS* (4)/(3)
Net Domestic Product	24,526	26,053	106.2	25,605	27,112	105.9
	4.4	5.1		4.4	4.1	
Agriculture	8,466	8,662	102.3	9,109	9,058	99.4
	6.9	3.0		7.6	4.6	
Mining	592	513	86.6	714	582	81.5
	43.0	18.5		20.6	13.4	
Manufacturing	4,035	4,893	121.3	4,113	5,144	125.1
	.4	6.5		1.9	5.1	
Others	11,433	11,985	104.8	11,669	12,320	105.6
	5.2	6.5		2.1	2.9	

* This means that the actual accomplishments are evaluated in relation to the planned targets. 100 means that actual performance exactly matches targes; less than 100 implies under-attainment and greater than 100, over-attainment.

N. B. Numbers indicated below the absolute values are growth rates.

Table 3—FOREIGN TRADE, FY 1970-71
(In million U.S. dollars)

	(1) PLANNED FY 1970	(2) ACTUAL FY 1970	ACTUAL AS PER CENT OF PLANNED TARGETS* (2)/(1)	(3) PLANNED FY 1971	(4) ACTUAL FY 1971	ACTUAL AS PER CENT OF PLANNED TARGETS* (4)/(3)
EXPORTS	935	932	99.7	995	1,118.0	112.4
	10.5	10.1		6.4	15.8	
IMPORTS	1,095	1,104.0	100.8	1,095	1,099.5	100.4
	(6.3)	(5.6)		0.0	(1.3)	

* This means that the actual accomplishments are evaluated in relation to the planned targets. 100 means that actual performance exactly matches targes; less than 100 implies under-attainment and greater than 100, over-attainment.

Figure 2

NET DOMESTIC PRODUCT BY SECTORAL ORIGIN
FY 1970 AND FY 1971
(In million pesos at 1967 prices)

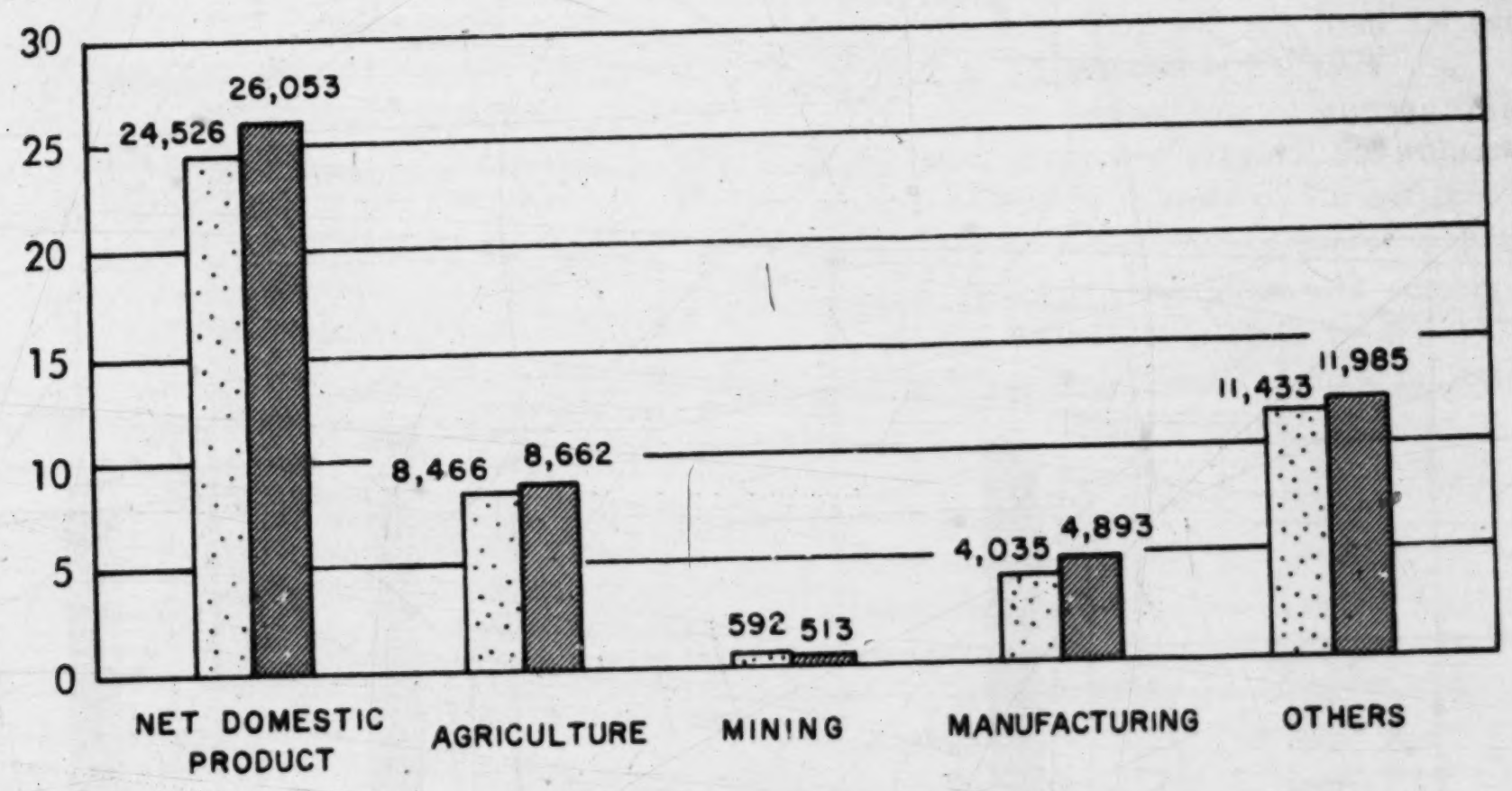
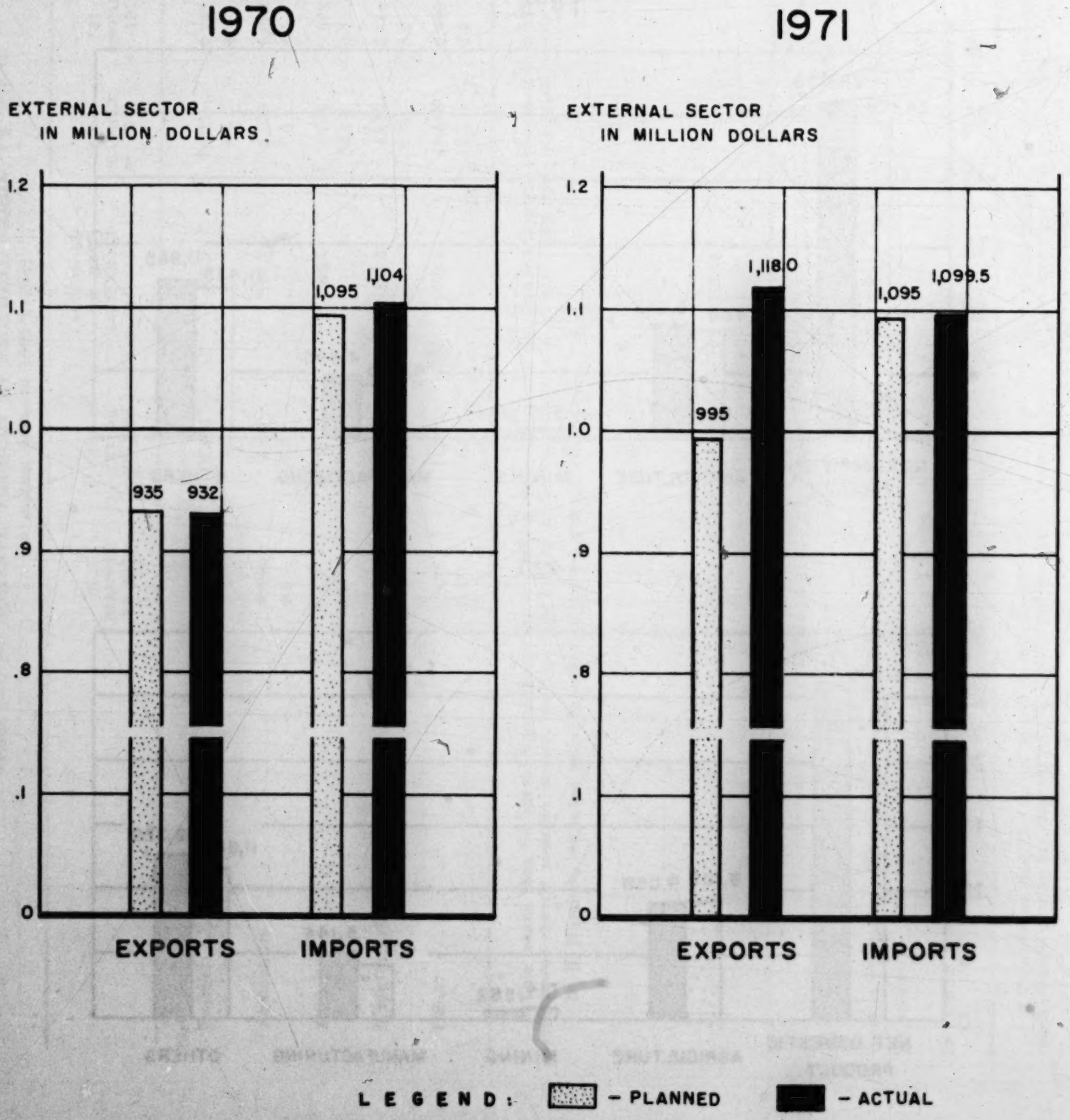


Figure 3

FOREIGN TRADE
FY 1970 AND FY 1971
(In million U.S. dollars)



three important intermediate guidelines are provided for in the Plan, namely, the expansion and diversification of exports, the utilization of relatively more labor-intensive methods of production, and the strengthening of industrial linkages.

B. Over-all Targets

The Plan targets were defined with the help of an empirical macroeconomic model of the economy. This model indicates the relationships between different economic variables in the economy — for example, between employment and gross national product, between money supply and prices, between personal consumption expenditures and prices. Thus, the planner is made aware of the implications of the assumption of alternative policies, and, accordingly, of what targets are feasible under different assumed conditions.

The Gross National Product (all peso values are in constant 1967 prices, unless specified otherwise) is targeted to increase at an average rate of 6.9 per cent per year, accelerating from 6.5 per cent in FY 1972 to 7.0 per cent in FY 1975. It will reach a level of ₱43.1 billion in FY 1975 from a level of ₱35.2 billion in FY 1972. Assuming a constant population growth rate of 3.1 per cent, per capita GNP will grow from ₱904 in FY 1972 to ₱1,010 in FY 1975; this represents an average growth rate of 3.7 per cent per year during the Plan period.

These output targets wil require investments of ₱7.9 billion in FY 1972, ₱8.7 billion in FY 1973, ₱9.4 billion in FY 1974 and ₱10.3 billion in FY 1975, implying an average growth rate in domestic capital formation of 11.4 per cent per year. The share of domestic investment to GNP will increase from 22.7 per cent in FY 1972 to 23.8 per cent in FY 1975.

To sustain the growth in output, at the same time ensuring that savings are generated for investments, personal consumption expenditures will increase from a level of ₱25.9 billion in FY 1972 to ₱31.0 billion in FY 1975, growing at an average rate of 5.4 per cent per year. Its share to GNP will decrease from 73.7 per cent in FY 1972 to 72.0 per cent in FY 1975.

C. Sectoral Targets

Aggregate sectoral production will witness an initial agricultural thrust of 5.7 per cent that should bring about self-sufficiency in food staples by FY 1972. Agricultural momentum will slacken moderately to an average rate of 5.1 per cent in FY 1973-75, sustained mainly by food and crop diversification activities. In effect, value added in the agricultural sector will increase from ₱9.6 billion in FY 1972 to ₱11.1 billion in FY 1975. The sector's share in the Net Domestic Product is expected to fall from 33.3 per cent to 32.0 per cent by FY 1975.

Meanwhile, mining activities, encouraged by a favorable exchange rate policy and increasing world demand, will continue expanding at an average rate of 21.8 per cent annually. By FY 1975, mineral output should hit a level of ₱1.28 billion, especially as nickel production goes full blast. Consequently, the mining sector's share to NDP will rise from 2.4 per cent in FY 1972 to 3.7 per cent in FY 1975.

Likewise, the manufacturing sector will step up intermediate processing activities and expand with an average production increase of 9.0 per cent per year. By FY 1975, manufacturing output is projected to reach ₱7.2 billion. The sector will account for 19.0 per cent of NDP in FY 1972; by FY 1975, it will account for a larger share of 20.9 per cent. Manufacturing and mining together will account for 24.6 per cent of NDP in FY 1975, up from the 21.4 per cent of FY 1972.

Construction activities are projected to increase at an average growth rate of 13.5 per cent per year, their share to NDP remaining roughly constant at 3.0 per cent up to FY 1975. The support sectors, namely, transportation, commerce, and services, are expected to experience fairly rapid growth rates from FY 1972 to FY 1975. Transportation will grow by an average rate of 5.8 per cent per year, while commerce and services at 5.3 and 4.0 per cent per year, respectively. The combined share of these sectors to NDP averages about 41.4 per cent throughout the Plan period.

D. Public Sector Program

The public sector program envisions a substantial increase in the level of capital expenditures from FY 1972 to FY 1975. While current government expenditures (local and national) are projected to increase by 11.4 per cent in 1972 and subsequently by 4.5 per cent per year, capital outlays are planned to expand by an annual average growth of 31.2 per cent. Thus, the share of public investment in total investment will rise to 13.0 per cent in FY 1975 from 8.5 per cent in FY 1972. Government current expenditures will increase from a level of ₱3.2 billion in FY 1972 to ₱3.6 billion in FY 1975. On the other hand, capital expenditures will expand from ₱0.68 billion in FY 1972 to ₱1.3 billion in FY 1975.

3. DEVELOPMENT PLAN FY 1971-74 COMPARED TO DEVELOPMENT PLAN FY 1972-75

Among other things, the revised Plan differs from the earlier Plan primarily in the magnitudes of annual fiscal targets and growth rates set for the economy and its different sectors.

A visual comparison may be easily obtained from Table 4. It is appropriate only to state here the general differences without having to delve very much into numerical details.

Very briefly, the revised Plan contains higher projections for gross national product; net domestic product; for value added in manufacturing, in the combined residual sectors; investment level; and export and import values through the fiscal years 1972-74.

The targets in both mining and agriculture have been adjusted downwards in the revised Plan in view of recent performance. This is a conscious dissociation from the attitudes that traditionally influenced past thinking over the two sectors. The Plan, however, does not contemplate holding mining and agricultural growth down; rather, there is an express intention of pushing the other sectors forward even more.

Mining expectations have lately been thwarted by operational snags often caused by inadequate financing. The high targets in the previous Plan have never been quite achieved and will, therefore, be moved downwards to more realistic levels.

Agricultural growth will likewise experience downward adjustments. The rationale resides in the contention that by FY 1972 self-sufficiency in staples will have been fully achieved, leaving future agri-growth to stem mostly from feeds and crop diversification activities. In the years following FY 1971, industry (mining and manufacturing) is expected to catch up and be a contender for the leading sector by FY 1975.

4. POPULATION AND INCOME ACCOUNTS STATISTICS

The following are some basic population and national income accounts statistics:

a) Population

Total (1970 census)	37 million
of which:	
Urban	33.1 per cent
Rural	66.9 per cent

b) Gross National Product

Total 1970 (at constant 1967 prices)	₱31,735 million

c) Per capital GNP*

in Philippine ₱ (at constant 1967 prices)	₱855
in U.S. $	$219

d) Gross National Product by Industrial Origin, CY 1960-CY 1970 (see Table 5).

e) Gross National Product by Expenditure Shares, CY 1960-CY 1970 (see Table 6).

* The per capita GNP figure is in terms of constant 1967 prices. Thus, the relevant exchange rate to use in converting pesos into dollars is ₱3.90 to one U.S. dollar.

Table 4—DEVELOPMENT PLAN FY 1971-74 COMPARED TO DEVELOPMENT PLAN FY 1972-75 [1]

ITEM [2]		1971 [3]	1972	1973	1974	1975	ANNUAL AVERAGE GROWTH RATE (PER CENT)
GNP	A	33,042	35,190	37,653	40,290	43,110	6.9
	B	30,485	32,162	34,092	36,308		5.5
NDP	A	27,112	28,739	30,607	32,596	34,715	6.4
	B	25,605	27,039	28,618	30,553		5.7
Agriculture	A	9,058	9,572	10,106	10,106	10,610	5.3
	B	9,109	9,602	10,161	10,719		6.1
Mining	A	582	681	838	1,034	1,276	21.8
	B	714	886	947	1,137		18.0
Manufacturing	A	5,144	5,467	6,000	6,600	7,250	9.0
	B	4,113	4,301	4,691	5,127		6.2
Others	A	12,320	13,019	13,663	14,856	15,579	6.0
	B	11,669	12,250	12,889	13,570		4.4
Investment	A	6,678	7,995	8,680	9,445	10,271	11.4
	B	6,456	6,815	7,228	7,697		4.7
Public I	A	455	808	980	1,306	1,711	31.2
	B	938	1,020	1,332	1,348		15.2
(Million U.S. dollars)							
Exports	A	1,118.0	1,335.4	1,462.9	1,610.2	1,777.2	10.1
	B	995	1,065	1,175	1,287		8.5
(Million U.S. dollars)							
Imports	A	1,099.5	1,370	1,520	1,690	1,870	10.8
	B	1,095	1,157	1,215	1,275		4.0

[1] In million pesos at constant 1967 prices.
[2] A: Dev. Plan FY 1972-75.
B: Dev. Plan FY 1971-74.
[3] Estimates, not targets in the case of Dev. Plan FY 1972-75.

Table 5—GROSS NATIONAL PRODUCT BY INDUSTRIAL ORIGIN, CY 1960-70
(In million pesos at constant 1967 prices)

INDUSTRIAL CLASSIFICATION	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
1. Agriculture, Fishery and Forestry	5,544	5,827	6,068	6,544	6,360	6,247	7,235	7,667	8,019	8,367	8,750
2. Mining and Quarrying	226	241	244	248	257	281	314	346	408	461	542
3. Manufacturing	2,788	2,904	3,057	3,305	3,361	3,393	3,651	3,832	4,466	4,760	5,042
4. Construction	519	568	524	640	693	782	763	892	827	873	660
5. Transportation, Communication, Storage and Utilities	677	706	732	769	796	843	882	928	967	1,009	1,063
6. Commerce	2,330	2,424	2,606	2,722	2,837	2,966	3,134	3,358	3,696	3,896	4,125
7. Services	3,644	3,871	4,129	4,419	4,636	4,893	5,107	5,358	5,697	6,045	6,254
8. NET DOMESTIC PRODUCT at factor cost	15,728	16,541	17,360	18,647	18,940	19,405	21,086	22,378	24,080	25,411	26,436
9. NET NATIONAL PRODUCT OR NATIONAL INCOME	15,536	16,409	17,275	18,579	18,850	19,285	20,951	22,080	23,693	25,114	25,925
10. Indirect taxes net of subsidies	1,386	1,533	1,685	1,776	1,727	1,742	1,857	2,016	2,129	2,297	2,582
11. Capital consumption allowance	1,001	1,037	1,227	1,405	1,594	1,833	2,053	2,307	2,600	2,925	3,228
12. GROSS NATIONAL PRODUCT at market prices	17,923	18,779	20,187	21,760	22,171	22,860	24,861	26,403	28,422	30,336	31,735

Source of Basic Data: *The Statistical Reporter*, Vol. IV, No. 2; Vol. V, No. 2; Vol. XIII, No. 2; The National Income of the Philippines for CY 1968 to 1970, Office of Statistical Coordination and Standards, National Economic Council (unpublished).

Table 6—GROSS NATIONAL PRODUCT BY EXPENDITURE SHARES, CY 1960-70
(In million pesos at constant 1967 prices)

TYPE OF EXPENDITURE	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
1. Personal consumption expenditures ...	15,206	15,853	16,558	17,150	17,784	18,445	19,153	19,601	21,442	22,755	23,645
2. General government consumption expenditures	1,469	1,622	1,804	2,008	2,091	2,203	2,310	2,378	2,651	3,002	2,865
3. Gross domestic capital formation	2,337	3,041	3,223	3,691	4,129	4,338	4,510	6,239	6,421	6,486	6,610
4. Net Exports	715	143	(852)	40	(319)	21	825	(569)	(1,673)	(1,434)	(764)
a. Exports of goods and services	2,524	2,579	2,564	3,129	3,422	3,999	5,015	4,703	3,989	4,029	5,498
b. Less: Imports of goods and services	1,809	2,436	3,416	3,089	3,741	3,978	4,190	5,272	5,662	5,463	6,262
5. EXPENDITURES ON GROSS DOMESTIC PRODUCT	19,727	20,659	20,733	22,889	23,685	25,007	26,798	27,649	28,887	30,809	32,356
6. Net factor income from abroad	(192)	(132)	(85)	(68)	(90)	(120)	(135)	(298)	(387)	(299)	(510)
7. Statistical discrepancy	(1,612)	(1,548)	(461)	(1,061)	(1,424)	(2,027)	(1,802)	(948)	(78)	(174)	(111)
8. EXPENDITURES ON GROSS NATIONAL PRODUCT	17,923	18,979	20,187	21,760	22,171	22,860	24,861	26,403	28,422	30,336	31,735

Source of Basic Data: *The Statistical Reporter*, Vol. IV, No. 2; Vol. V, No. 2; Vol. XIII, No. 2; The National Income of the Philippines for CY 1968 to 1970, Office of Statistical Coordination and Standards, National Economic Council (unpublished).

PART I

Goals and Objectives

CHAPTER I

Goals and Objectives

I. ECONOMIC PROSPERITY

Economic development is recognized as the long-term process of dynamic economic growth, characterized by the consequent development of economic and non-economic institutions. **In the long run,** its goal continues to be sustained material prosperity for the greatest number of citizens. Viewed in different ways, this assumes different meanings: high per capita income, widespread employment, more equitable distribution of wealth, regional industrialization, and internal economic stability.

A. High Per Capita Income

The per capita income is a crude measure of individual purchasing power. However, the movement of this ratio over time provides a reliable indication of the behavior of labor productivity. Assuming inflationary elements to be adequately discounted, an uptrend in this figure would suggest that national output is rising more rapidly or declining less steeply than population. The implication is that every living person should be better off than his previous economic locus. That is, his consumption capacity is larger because he shares a portion of the larger income pie, made possible only by improving productivity. Improved productivity upgrades the value of human labor. Then and only then is human dignity truly enhanced.

B. Widespread Employment

A higher rate of employment will require the promotion of sustained employment opportunities for a larger group of citizens. This results in a corresponding increase in welfare per head. The value of this goal is better appreciated in relation to the large population which now grows at the rate of 3.1 per cent annually.

Due to the youth-heavy population, the rate of entrants into the labor force, proceeding at 3.5 to 4.0 per cent yearly, now exceeds the natural population growth. With considerable underemployment and unemployment, it becomes imperative for the rate of job-creation to surpass the labor entry rate, if, in the end, the economy is to reach the goal of widespread employment.

C. More Equitable Income Distribution

Social and income inequality need to be reduced. While, in the transitory stage, taxation may be the principal instrument used, only economic prosperity will best narrow this gap between rich and poor, as more goods and services become accessible to a wider number of people at ever lowering costs, not necessarily in terms of money but, maybe, of labor service.

The only other alternative is economic destitution at equal levels of poverty, which poses to be an irrational solution.

D. Regional Industrialization and Development

The goal of wider income distribution would logically absorb the adoption of regional industrialization as a complementary goal.

However, the unnatural imposition of regional industrial dispersal is uncalled for if this puts brake pressures on the overall pace of economic development.

Emphasis on it serves merely to remind against "development" policies that deviate from the natural path of maximal efficiency and balanced growth. A case in point are "concentration-oriented" policies that artificially favor very few select areas in the industrialization process.

E. Internal Stability

On the other hand, internal economic stability provides the only guarantee to sustained economic prosperity. Material prosperity alone is not the ultimate end. It is only the means to economic and social welfare. Maintaining prosperity is equally essential to development.

The staying power of a prosperous economy is a direct function of stability in governmental management. Sound tax and money policies hold the key to rapid and sustained growth. Thus, vigilance over such instruments which generate macroeconomic repercussions gives the only assurance of trade fluidity and commercial order. Internal economic stability is not so much a goal but it is a necessary, although insufficient condition. It is only sought insofar as it is the prerequisite to the ultimate goal of attaining greater

welfare for the citizenry. These, then, are the long-run targets of development planning, of which the present document is one manifestation.

The Four-Year Plan FY 1972-75

This four-year Plan has been drafted not only in view of recent economic developments that somewhat backdate previous plans, particularly the projections therein, but, more positively, also because of technical refinements that improve on the last version. Moreover, the timetable covered is now rolled over to include the four-year fiscal period from 1972 to 1975.

Intermediate Guideposts

Since it is very unlikely for the long-run goals to be realized within the short Plan period, three intermediate objectives for the next four-years have been adopted.

The Philippine economy has displayed essential properties of resiliency and stability throughout her postwar years, yet two especially big problems have always stuck out during that time — balance of payments deficits and unemployment.

The answer to these two problems resides in the strategy of export-expansion and labor-intensity particularly through a program of strengthening industrial linkages. These guideposts for directing investment flows within the economy are embraced as the intermediate objectives of the Plan. They constitute a full departure from the inward-looking import-substitution scheme adopted in previous decades.

This is not to imply total abandonment of import substitution. The ultimate strategy as far as imports are concerned lies in import-competition which is not far removed from export promotion. It is believed that a more rational use of scarce economic resources will derive from the new strategy, allowing for orderly import substitution which the nature of economic growth demands.

1) Export Expansion

Export promotion will contribute toward strengthening the balance of payments position, raise the level of industrial economic growth, and further pay for greater investments and raw material needs met only by imports. So, for these reasons and particularly for its energizing impact on the economy, export expansion will be the prime concern of economic planning for the four-year program.

2) Labor-Intensity

In the face of the large labor force, the observed unemployment, and the widely-held underemployment in the economy, policy emphasis on the development of fairly labor-intensive industries becomes rather important. This emphasis will help create a greater degree of employment than would otherwise ensue. Finally, it lends a better-appealling egalitarian effect than an undue concentration on capital-intensive projects would.

3) Industrial Linkages

The emergence of regional and industrial linkages will be a necessary consequence of a rational industrialization campaign. Export-propelled development is first likely to exhaust economical resource-based activities that render export products more competitive internationally. Opportunities therefore open up for different regions to undertake the appropriate activities (intermediate processes) which prove economically advantageous. Then regional linkages will form and industries should spread wide among benefited regions. This would avoid the unnatural clustering of industry into select urban areas.

2. PRIORITIES

Although development may be left largely to private initiative, government owns the responsibility to hasten the process by providing infrastructure that minimizes social and economic overhead for private business. Government serves as the catalyst to development by undertaking projects that induce economic activity through ancillary industries.

Naturally, the extent of effective government assistance will be limited by the amount of available resources. Taxation and public debt constitute the major sources of revenue. Historically, eighty-five per cent of this total is eaten up by operational expenses needed to maintain a satisfactory level of day-to-day services and functions by different government agencies. Just the small residual is left for social development purposes.

In view of this constraint, rationing of development projects over scarce budget funds becomes inevitable. Therefore, the innumerable public projects are subjected to a ranking schedule and areas of activity considered strategic from a developmental angle are given preferential funding treatment.

The hierarchy of priorities, however, is not intended to mislead but merely to guide. The illusion of pref-

erential gradation is a matter of academic debate. That these areas have been specifically designated, render each one of them equally important from an integral development stance.

In the earlier Plan document, 5 specific areas were mentioned: land reform, manpower training, infrastructure, community development, and family planning. These have all been carried over to the present program and 10 new areas have been added as well. These new named areas are: cooperatives, educational reform, housing, rural electrification, food production, export promotion, tourism, national employment program and cottage industries, massive land distribution, and health.

A. Land Reform

Land reform continues to be a priority as the current social unrest points to the urgency of overhauling traditional relations between landlord and tenant. The long-run goal of land reform is to transform the latter into an owner-operator. Because land reform is not an isolated ideal that can stand by itself, there is a need to work on transitional changes, particularly in the areas of leasehold arrangements, agricultural credit policy, and extension programs.

However, the land reform program requires a funding program which can only come from additional taxation. Perhaps, staying the level of the Export Tax rates would prove highly fruitful for the success of the program.

B. Manpower Training

In the industrial sphere, manpower training is a key issue because vocational and technical training costs are perceivably prohibitive from a private standpoint. To maintain a certain speed of modernization, government needs to insure a reasonable availability of highly-skilled labor and competent management, where scarcity in supply remains most peculiar.

Nonetheless, the conditions for private sector participation in manpower development costs need due accentuation, as this composes part of private industry's responsibility to its employees and to society.

C. Infrastructure

Infrastructure in the form of highways, airports, railways, portworks, and communications, facilitates physical cargo transport and speeds up information-relay. This saves sizably on transport costs and communications-delay, making for an efficient overall economic logistics. The less direct effect, of course, is the ushering in of ancillary industries in once-virgin areas and wider diffusion of generated employment. This fosters not only economic developments, but regional development as well.

D. Social Welfare and Community Development

Community development likewise involves waterworks, school buildings, communal irrigation, feeder roads, and multi-purpose centers. This only scales down national infrastructure projects to the rural community level. Thus both of them work on parallel principles.

The current export promotion drive becomes specially relevant to this priority as the investment focus shifts from "big-scale"-ness to small-scale operations, brought on partly by the redirective effects of exchange rate reform.

In this connection, the new priority area of small and medium-scale industries that perform an indispensable economic function benefits directly in terms of transport logistics coming in the form of feeder roads, particularly. This illustrates how the priorities fall into place with the intermediate objectives of the Plan.

The role of Social Welfare is to look after the left-out people in society: the physically handicapped, indigents, sociological deviates, economic destitutes, reformatory cases, persons nobody else would bother and attend to within the foreseeable and painful future.

Many physical or environmental defects are not necessarily self-inflicted and these unfortunate cases need not suffer what from the start may be no fault of theirs, if society can help it. Social Welfare is just one small manifestation of social awareness. And its function is to cushion the livelihood of these "outcasts" while they are still not able to maintain themselves, without necessarily killing the initiative towards ultimate self-reliance.

As such, social welfare activities have to be part and parcel of any meaningful community development strategy. Because social welfare will have its price and will be working within limited resources, it is to be doled out solely on the basis of **need** and not **want**. Some judgment will have to be exercised. Social welfare is a last resort palliative. It should remain that way.

E. Family Planning

Family planning is of major concern to social scientists since uncontrolled population growth would con-

sume extra resources that should otherwise flow into the investment stream. Consequently, this thwarts development efforts. Because lower investment propels less production, uncontrolled population proves to be an important deterrent to economic growth.

F. Cooperatives

Cooperatives gain importance in that they promote the general social objectives of more egalitarian income distribution and economic development, based on the philosophy of enlarging small economic units. They generate economies of scale inherent in pooling together weak and isolated resources. The rationale lies in the strong bargaining power derived from bigness.

There are cooperative units for producers, consumers, as well as savers. In the case of producers, cooperatives prove helpful in generating more efficiency in marketing, distribution and selling. For consumers, they help in obtaining cheaper "bulk-purchases" and improving market information. For example, in electricity transmission, volume demand is a determinant of cost per watt-hour as well as of technological economies. The increase of cooperative organizations in rural electrification is the founding touch-stone of the program to diffuse the benefits of electrification to rural areas.

Revival of cooperative associations necessary to increase productivity, accelerate agrarian reform, develop financing lines through widely-dispersed credit unions, and preserve continuity of activities on land reform areas prone to disruptions caused by estate ownership transfers, will be sought.

G. Educational Reforms

Reforms in the educational system are long overdue. At one level, there is need to improve and increase educational facilities, textbooks, financial resources, and courses. At another level, there is the urgency to realign the functions and role of the educational systems to facilitate the attainment of development objectives.

At yet another level, there is the need to re-examine and foster new educational programs that are basically demanded by a changing economic society.

The traditional functions played by the elementary schools, high schools, vocational and technical schools, and universities, have to be reviewed. Therefore, it is important for government to play an active role in fostering and redefining the educational system as represented by the state-supported programs and privately-run institutions.

H. Housing

A redirection of investment from large expensive housing to low-cost housing becomes a fundamental goal for society. At this stage of industrialization, sidewalk spreads and make-do shanties may be regarded as social anachronisms. Furthermore, low-cost housing directly serves the goal of equalizing income distribution as larger purchasing power accrue to the poorer families.

I. Rural Electrification

Rural electrification is strategic in that it gives birth to ancillary industries. It paves the way for industrial and agricultural development and, ultimately, higher productivity in the rural areas. It raises commercial expectations and, with it, the motivation to earn and invest.

The outcome is a high standard of living for affected localities as new incomes from newly established industries accrue to local workers. The macroeconomic effect, of course, is the wider distribution of income, both in the personal and regional sense. As already mentioned, the concept of electric-service cooperatives arises in connection with transmission linkages integrated with major power plants. This minimizes costs for the cooperative and optimizes utility for existing power resources.

J. Food Production

Self sufficiency in food production continues to be a primary goal. The green revolution has already scored a timely victory over problems of agriculture in the country, and this has to be sustained. Already, a surplus in staple cereals has been fruitfully achieved, although a freak shortage occurred in 1971. Still, government continues to build support in the form of agricultural infrastructure such as roads, irrigation and power. As self-sufficiency is attained, growth will have to proceed from crop diversification for both domestic and export demand.

K. Export Promotion

The export promotion drive enjoys priority ranking because foreign exchange inflow stretches the capacity to import commodities needed to further goad on economic progress. Exports are not ends in themselves and are desirable only because the foreign exchange accruing are used to purchase the imports essential

to developmental inertia.

Therefore, emphasis is being given to the continued efforts in reducing administrative inconveniences with respect to exporting, in order to expand assistance to export industries and favorably treat import-replacing activities.

L. Tourism

Tourism is now being eyed as a growing dollar earner that will help alleviate the imbalance of payments and increase demand for local products. The direct result would, of course, be higher domestic output. The impact on employment becomes obvious in that most of tourist-purchases are native articrafts or "labor-intensive" souvenirs.

To promote tourism, infrastructure implementation in the form of better roads, facilities improvements, rest plants and resorts, is being undertaken.

M. Cottage Industries and Employment

Cottage industries and employment are areas not much divorced from tourism or exports. Nevertheless, the cottage industry is being specified as a priority because it is directly linked with the objectives of labor-intensity. Furthermore, it provides service to large-scale businesses that find it less economical to undertake certain intermediate processes.

N. Land Distribution

Land distribution is cousin to the land reform concept. The land distribution program includes the release and disposition of greater land hectarage to landless farmer-occupants, the resolution of property conflicts, and the reformation of cumbersome patenting/titling procedures which fuel social discontent.

Likewise, identification of high-potential areas for expediting mineral and petroleum exploitation provides a most welcome incentive to risk-shy private capital, whether local or foreign.

This arrangement achieves both wider distribution of wealth and income, and the immediate utilization of untapped resources helps to create employment as well.

O. Health

Even as national health continues to improve, government infrastructure will add badly-needed floor room to existing hospital and sanitary space as demand keeps increasing annually.

The battle against communicable diseases is more than half won now with the successful campaign waged against malaria; nevertheless tuberculosis still answers for quite a number of yearly casualties. In any case, the government is engaged among other things in frontal assaults against disease carriers, dissemination of nutritive education, pollution prevention, training of more health personnel, updating of facilities, and diffusion of services. Maybe, a sense of sports-orientation precipitated by the series of well-publicized glamor leagues could help to promote nationwide health consciousness.

There remains one sticky problem in the medical campaign that has somewhat demaged its local image. This is the annual exodus of skilled medical personnel induced by remuneratively attractive opportunities abroad. This "brain-hemorrhage", to use medical parlance, injects a negative ingredient that has hurt the quality and standard of the domestic medical profession.

Remarks

These priorities provide the guidelines to planned activities of individual economic sectors for the program period. A conscious effort has been exerted by each government agency concerned to streamline sectoral activities with these ends in mind.

3. GROWTH TARGETS

This overview of planned future achievement is anchored on a modest sense of optimism. Regaining economic composure from a gruelling adjustment period in FY 1970 and 1971 that saw some powerful policy-shifts redirect the development path ought to strengthen confidence in the economy. This present Plan, therefore, unfolds with the promise of brighter prospects in the event that the internal effort supplemented by adequate foreign assistance is achieved.

While the major guideposts serve to direct general economic behavior, the medium-term goals become more visible when translated in concrete terms. Therefore, a brief quantitative résumé of the Plan targets is presented (see figures in Tables 1.1 and 1.2). These figures represent the acceptable minimum levels that economic growth is expected to achieve for each sector. **All magnitudes except percentages are expressed in constant FY 1967 prices.** Separate discussions of detailed plans for individual sectors follow in later chapters.

A. Gross National Product (GNP)

In FY 1972, it is expected that the economy will have recovered from a transitional slump and surge forward at a faster rate of 6.5 per cent, gaining momentum in the ensuing years towards a sustained 7.0 per cent growth velocity by FY 1975. The hope is that GNP will break the ₱43.0 billion level by FY 1975 from the ₱33.0 billion of FY 1971. This uptrend is not considered steep and has been historically achievable. On a four-year average, the rate settles around 7.0 per cent, a performance quite familiar to the early fifties during which certain allowances for inefficiency were still being tolerated.

B. Per Capita GNP

If population growth continues at the rate of 3.1 per cent, the economy in FY 1972 is expected to yield a per capita income of ₱904 or a 3.4 per cent increase over the previous year's. In the four-year stretch, per capita income should hit ₱1,010, with the net increase reaching a relative maximum of 3.9 per cent by FY 1975. This means FY 1975 income per head will have advanced 12 index points from FY 1972, using FY 1970 as base year.

If the rate of population rate reduction envisioned in the population program is attained, the rates of per capita advance would be much more than the above figures. In view of the resources being devoted to family planning, chances are the per capita growth rates of the economy will be between the forecast implied by a reduced population growth rate figure and the ones implied at the constant rate of 3.1 per cent per year.

C. Expenditures Targets

1) Personal Consumption Expenditures

Increased buying power will enable personal consumption to proceed at an average annual rate of 5.4 per cent. This should bring up consumer expenditures from an FY 1972 level of ₱25.9 billion to an FY 1975 reading of ₱31.0 billion. However, its shares in GNP will very steadily recede from 73.7 to 72.0 per cent as annual GNP proceeds at a much accelerated pace.

2) Government Expenditures

In the public sector, expanded services and the maintenance of government agencies will see a four-year average annual increase of 6.2 per cent in the current account, bloated up by an 11.4 per cent initial thrust which subsequently normalizes at 4.5 per cent. At this rate, government expenditure share in GNP will drop to 8.4 per cent by FY 1975, shedding off 0.6 percentage points in the four-year process. Its magnitude is projected to rise from an FY 1972 estimate of ₱3.1 billion to an FY 1975 level of ₱3.6 billion.

D. Investment (Gross Domestic Capital Formation)

Hopefully, the economic targets will be realized, with gross domestic capital forming an average annual rate of 11.4 per cent, down from 19.7 per cent in FY 1972 to 8.7 per cent by FY 1975. Thereby, investments should break the ₱10.3 billion level by FY 1975, a good 29 per cent above the FY 1972 level of ₱8.0 billion.

1) Government

The ₱1.3 billion public infrastructure package in FY 1975 will more than double the FY 1972 allocation of ₱682 million. Its share will therefore shoot up from 8.5 to 13.0 per cent in four years. This betrays the increasing role that government is to play in propelling the economy onwards. These estimates of public investment depend critically on the assumption of (1) better tax performance and (2) a coordinated inflow of development resources from external sources for the public sector.

2) Private

Meanwhile, private investments will continue to provide the bigger portion of gross domestic capital formation, graduating from ₱7.3 billion in 1972 to ₱8.9 billion by the end of the Plan period. This contribution, however, will taper off from a 91.5 per cent share in FY 1972 to 87.0 per cent by FY 1975 as public infrastructure is revved up considerably in the next four years.

E. Foreign Trade Targets

1) Exports

As production capacity expands, the economy will have to look outwards to foreign markets. With this, exports are anticipated to grow at an average annual rate of 10.3 per cent. This would bring the value of exports up from ₱6.6 billion to ₱8.7 billion in four years.

2) Imports

At the other end, increasing exports will allow the import level to climb from ₱7.3 billion to ₱9.4 billion by the final year, implying an average real annual

Table 1.1—GROSS NATIONAL PRODUCT BY EXPENDITURES SHARES, FY 1970-75
(In million pesos at 1967 prices)

	ACTUAL	ESTIMATE	TARGETS				ANNUAL AVERAGE GROWTH RATE
	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975	FY 1972-75
Gross National Product [1]	31,320	33,042	35,190	37,653	40,290	43,110	6.9
Personal Consumption Expenditures	24,007	25,180	25,930	27,546	29,271	31,049	5.4
Per Cent Share to GNP	76.6	76.2	73.7	73.2	72.6	72.0	
General Gov't. Consumption Expenditures	3,038	2,835	3,158	3,298	3,446	3,600	6.2
Per Cent Share to GNP	9.7	8.6	9.0	8.8	8.6	8.4	
Gross Domestic Capital Formation (GDCF) [2]	7,041	6,678	7,995	8,680	9,445	10,271	11.4
Per Cent Share to GNP	22.5	20.2	22.7	23.1	23.4	23.8	
A) PRIVATE	6,359	6,223	7,313	7,827	8,379	8,939	9.6
Per Cent Share to GDCF	90.3	93.2	91.5	90.2	88.7	87.0	
B) GOVERNMENT	682	455	682	853	1,066	1,332	31.2
Per Cent Share to GDCF	9.7	6.8	8.5	9.8	11.3	13.0	
Exports of Goods and Services [3]	4,482	5,921	6,582	7,240	7,964	8,761	10.3
Per Cent Share to GNP	14.3	17.9	18.7	19.2	19.8	20.3	
Less: Imports of goods and Services	5,669	6,272	7,293	7,914	8,625	9,399	10.7
Per Cent Share to GNP	18.1	19.0	20.7	21.0	21.4	21.8	
Net Factor Income from Abroad	(337)	(467)	(633)	(678)	(713)	(746)	
Per Cent Share to GNP	(1.1)	(1.4)	(1.8)	(1.8)	(1.8)	(1.7)	

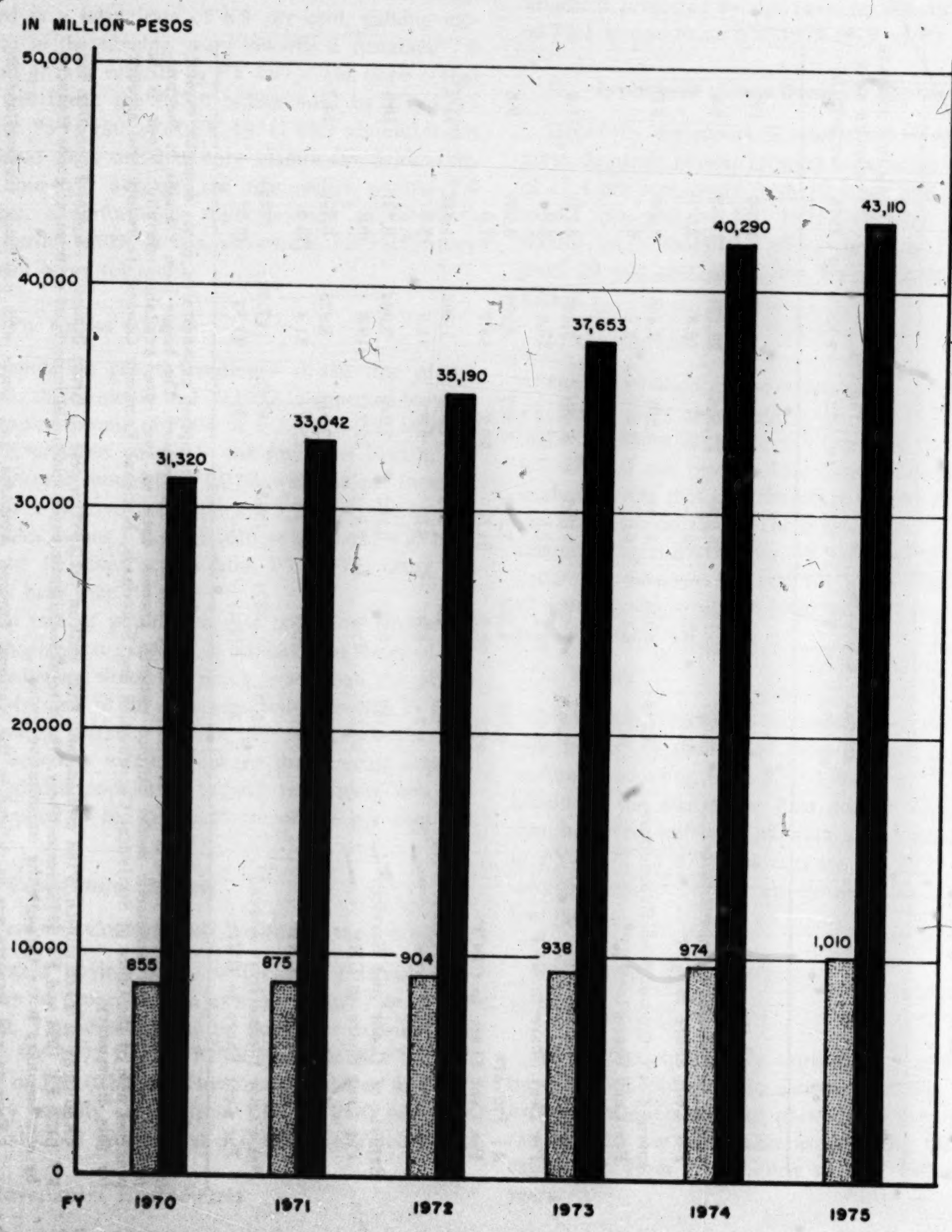
[1] The difference between GNP and sum of personal and government consumption expenditures, gross domestic capital formation, and exports minus imports are accounted for by statistical discrepancy. The latter item remains in the projections since the macroeconomic model utilized national income data as they are available officially. Work is in progress now at the Office of Statistical Coordination and Standards, National Economic Council, to reduce and account for this discrepancy.

[2] Additions of ₱132 million, ₱198 million, and ₱330 million (at 1967 prices) to Gross Domestic Capital Formation for FY 1973, FY 1974 and FY 1975, respectively, which represents anticipated additional imports of investment goods financed by concessionary loans through the consultative group.

[3] Exports and Imports are as defined in the National Income Accounts, i.e., trade and non-trade transactions in goods and services, including payments and receipts.

Figure 1.1

TOTAL AND PER CAPITA GNP
FY 1970-75
(At constant FY 1967 prices)



1/PER CAPITA GNP IS BASED ON THE ASSUMPTION OF A CONSTANT POPULATION GROWTH RATE OF 3.1 PERCENT.

LEGEND:

PER CAPITA GNP

GNP

growth of only 10.7 per cent which is slightly higher than that of exports. The projections of imports are based on a rising unit value of imports in view of continuing world inflation.

Sectoral Growth Targets

Aggregate sectoral production (NDP) is planned to trail the growth pattern of GNP at a distance of .5 per cent. Projections indicate a starting point of ₱28.7 billion in FY 1972 to a high of ₱34.7 billion by FY 1975. In view of past achievements, such a growth behavior has been estimated to lie within a high confidence interval.

1) Agriculture

Agricultural growth rate in FY 1972 is expected to gain strongly at 5.7 per cent with an output worth ₱9.6 billion. At this rate, it is estimated that self-sufficiency in food staples will have been achieved, leaving expansion in agriculture to level off for the rest of the timetable.

However, this does not mean that other components of agriculture, especially commercial crops, will follow similar declines. As a matter of fact, these sectors will grow; but the component of basic staples, being very large in total share, will bring down the aggregate growth rate.

By the end of the period the momentum of agricultural growth would have eased off to 5.0 per cent, reaching a production level of ₱11.1 billion. Its 33.3 per cent share in NDP will very slowly drop to 32.0 per cent after NDP growth begins to overtake agri-growth by FY 1973. Still, this rate is way above the natural growth of agricultural consumers which is at 3.1 per cent per year.

Infrastructure support will come with a program of irrigational and drainage facilities. Because agriculture opts for increased expansion and diversification, modernization of agriculture will be desirable insofar as it will release labor to newer or pioneer agricultural activities. In this respect, further advances in science and technology through intensified research, technical training, organizational cohesion, and applied use of technology, are called for.

Coordination in planning and utilization of land and water resources become indispensable to the attainment of the objectives. This will entail effective exploitation of land and water resources through cooperative farming, mechanization, and proper design of rural communities.

Self-sufficiency in staples will allow additional investments to divert to other crop and animal-raising activities. Staples will only need to match population increase and raw material demand, and further agri-growth must have to stem from advances in poultry and livestock output, export crops, and other food activities.

Agricultural investment will be encouraged by facilitating the mobilization of agricultural financing, improving credit services in farmers' associations, and tapping international lending outlets.

2) Mining

On the other hand, the export-oriented mining sector is expected to continue and display increasing importance as the participation rate in NDP peaks to 3.7 per cent by FY 1975 from 2.4 per cent at the start of the period. This sector is expected to perform excellently as the floating rate incentives free it from traditional constraints. Growth rate for the four years should rise steadily from 17.0 to 23.5 per cent. The initial-year level of ₱681 million will continue to increase until FY 1975 to an output of ₱1.3 billion.

Such growth figures in no way represent wild anticipations. The windfall incentives arising from the floating rate would easily inflate activity in this sector and hold production under-reporting to a minimum. Already, expansion plans have been publicly announced by several private concerns; nickel production, for instance, is expected to go full blast by FY 1975.

On the subject of oil, prospects do not readily appear as bright but neither are they dim. Geologists have long entertained a growing suspicion that the oil belt, which earns considerable foreign exchange for Indonesia, cuts across Philippine territory. Oil exploration corporations abound and appear credibly determined with quite ambitious plans. The few ones that have gone into actual operations have often been faced with the dilemma of financial scarcity and drilling failure. Historically, most operational activities have either remained or stopped in the drilling stage.

3) Manufacturing

Manufacturing growth rate is expected to shoot upwards from 6.3 per cent in FY 1972 to 10 per cent by FY 1975. If so, output level should hop from ₱5.5 billion to ₱7.2 billion, with NDP-participation climbing briskly from 19.0 to 20.9 per cent. In this connection, public infrastructure will play a no minor role in getting to these targets.

Table 1.2—NET DOMESTIC PRODUCT BY INDUSTRIAL ORIGIN
(In million pesos at constant 1967 prices)

	ACTUAL FY 1970	ESTIMATE FY 1971	TARGETS FY 1972	FY 1973	FY 1974	FY 1975	ANNUAL AVERAGE GROWTH RATE FY 1972-75
Gross National Product	31,320	33,042	35,190	37,653	40,290	43,110	
Growth Rate (%)	6.4	5.5	6.5	7.0	7.0	7.0	6.9
Population as of January 1 (In Millions)	36.624	37.760	38.931	40.138	41.383	42.660	
Growth Rate (%)	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Per Capita GNP (In Pesos)	855	875	904	938	974	1,010	
Growth Rate (%)	3.1	2.3	3.14	3.19	3.19	3.19	3.8
Net Domestic Product	26,053	27,112	28,739	30,607	32,596	34,715	
Growth Rate (%)	5.1	4.1	6.0	6.5	6.5	6.5	6.4
Agriculture	8,662	9,058	9,572	10,106	10,610	11,125	
Growth Rate (%)	3.0	4.6	5.7	5.5	5.0	5.0	5.3
Per Cent share to NDP	33.2	33.4	33.3	33.0	32.6	32.0	
Mining	513	582	681	838	1,034	1,276	
Growth Rate (%)	18.5	13.4	17.0	23.0	23.5	23.5	21.8
Per Cent share to NDP	2.0	2.1	2.4	2.7	3.2	3.7	
Manufacturing	4,893	5,144	5,467	6,000	6,600	7,250	
Growth Rate (%)	4.7	5.1	6.3	9.7	10.0	10.0	9.0
Per Cent share to NDP	18.8	19.0	19.0	19.6	20.2	20.9	
Construction	839	634	824	890	961	1,038	
Growth Rate (%)	13.4	(24.4)	30.0	8.0	8.0	8.0	13.5
Per Cent share to NDP	3.2	2.3	3.0	3.0	3.0	3.0	
Transportation	999	1,062	1,114	1,183	1,253	1,327	
Growth Rate (%)	1.8	6.3	5.0	6.0	6.0	6.0	5.8
Per Cent share to NDP	3.8	3.9	3.9	3.9	3.8	3.8	
Commerce	3,981	4,255	4,434	4,676	4,949	5,233	
Growth Rate (%)	8.9	6.9	4.2	5.5	5.8	5.7	5.3
Per Cent share to NDP	15.3	15.7	15.4	15.3	15.2	15.1	
Services	6,166	6,377	6,647	6,914	7,189	7,466	
Growth Rate (%)	4.9	3.4	4.0	4.0	4.0	4.0	4.0
Per Cent share to NDP	23.7	23.5	23.1	22.6	22.1	21.5	

Figure 1.2

NET DOMESTIC PRODUCT AT FACTOR COST
BY SECTORAL ORIGIN, FY 1970-75
(At constant FY 1967 prices)

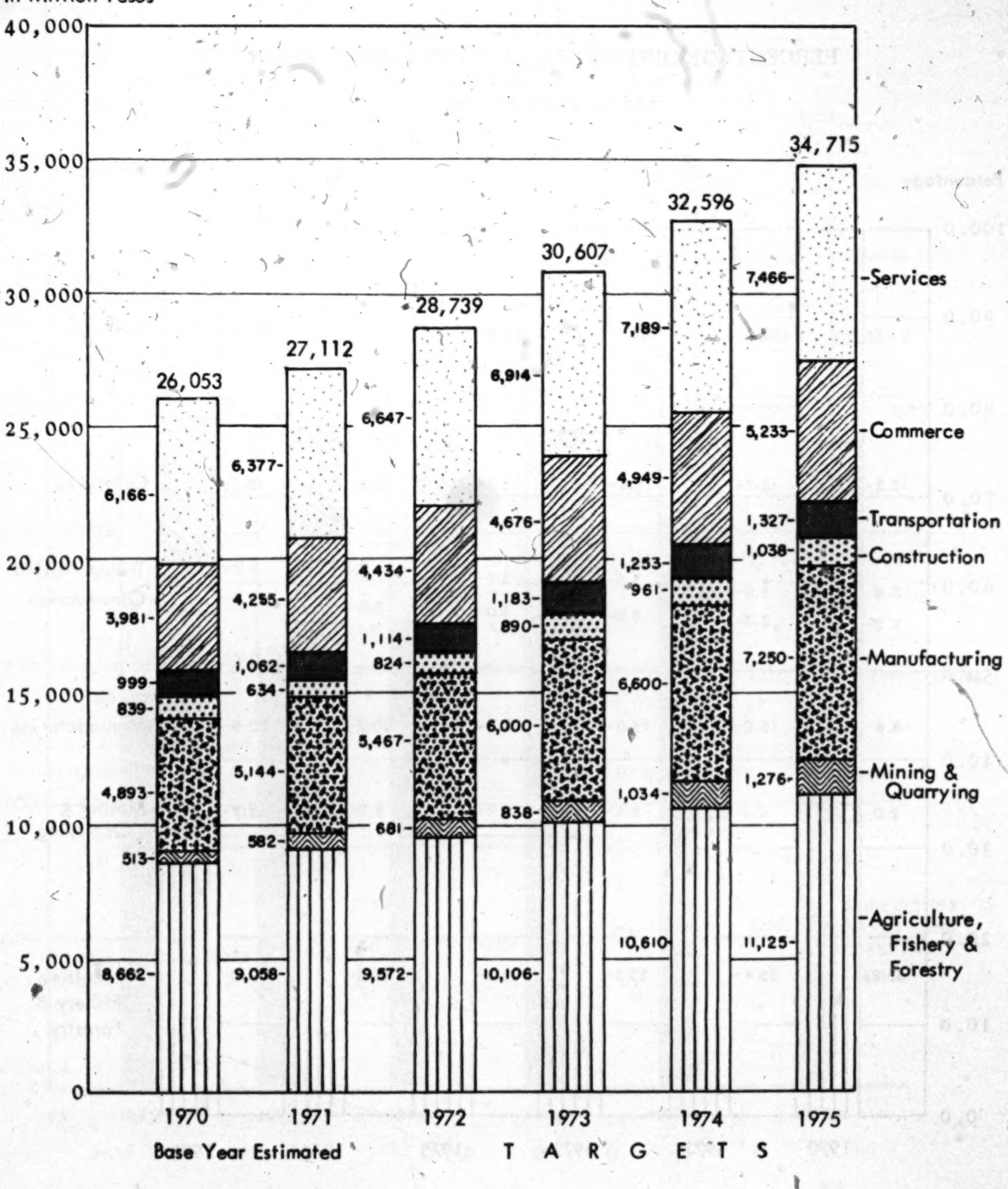


Figure 1.3

PERCENTAGE DISTRIBUTION OF NET DOMESTIC PRODUCT
FY 1970-75
(At constant FY 1967 prices)

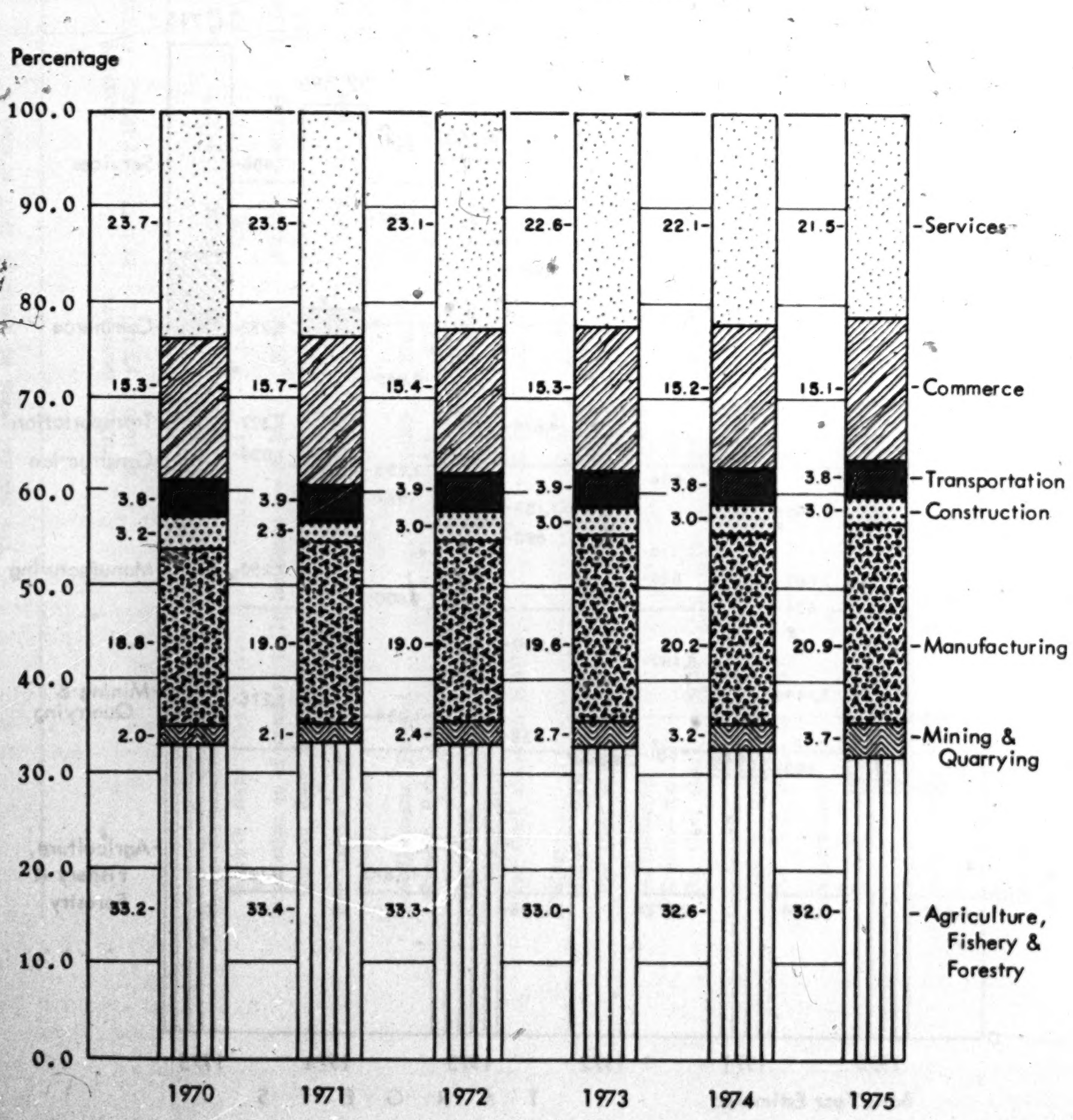
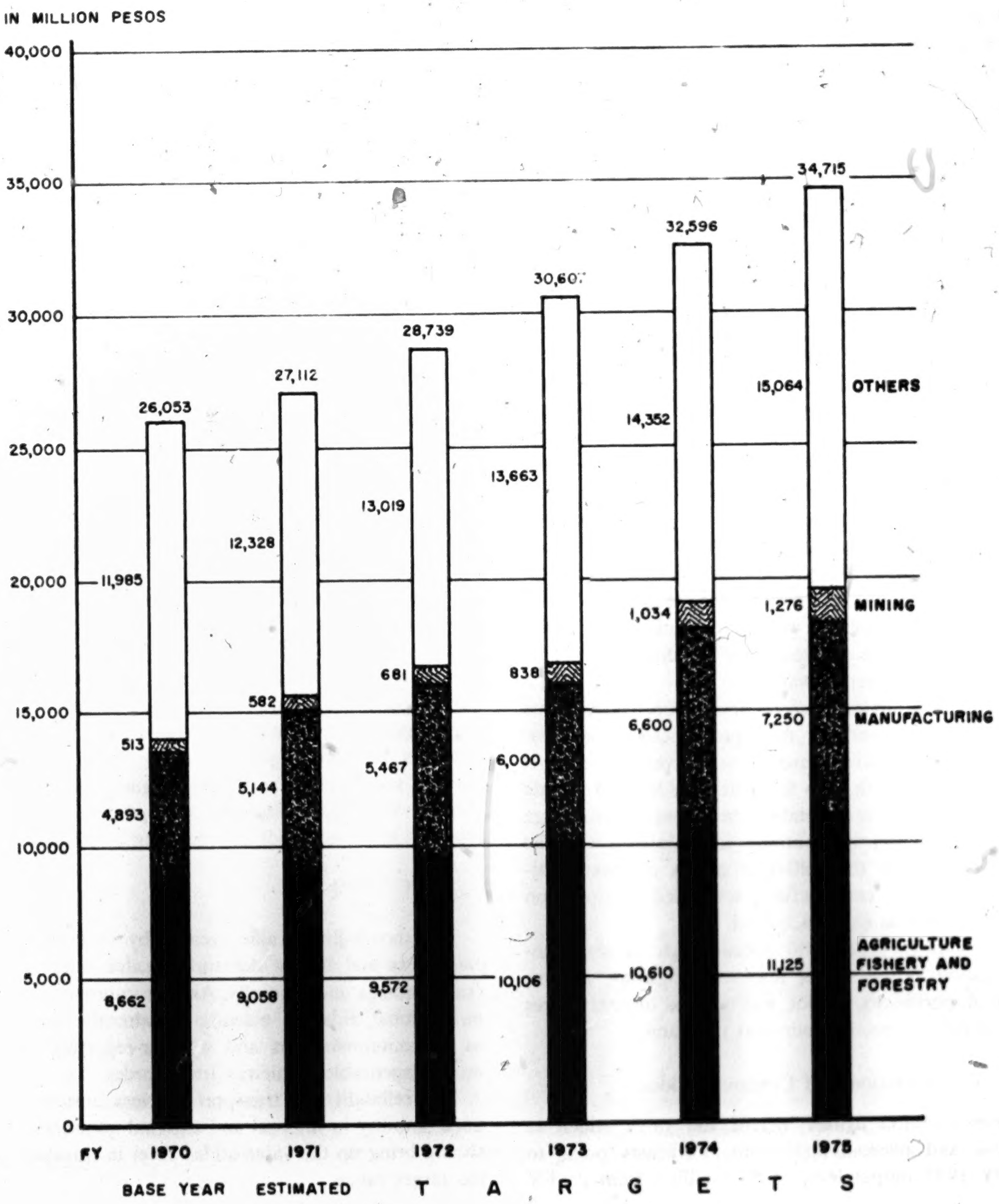


Figure 1.4

CONTRIBUTION OF MANUFACTURING INDUSTRY AND AGRICULTURE TO NET DOMESTIC PRODUCT
FY 1970-75
(At constant FY 1967 prices)



The increased growth rate will be realized through diversified manufacturing processes specifically oriented toward exports. Supplemented by a favorable exchange rate policy, such export activities should increasingly mushroom within the short time span. This prediction is especially true for intermediate log-processing, for example.

Further industrial development will warrant the continued expansion of manufactured exports, modernization of production techniques to meet foreign competition, nursing of light industries, integration of the electric power system as to deploy power supply; and the encouragement of business economies of scale through mergers, joint researches, modernized organizational management, and wider corporate ownership.

4) Construction

Construction activity will most likely surpass the ₱1.0 billion mark by FY 1975. The abnormally low level of activity in FY 1971 will recover to an initial FY 1972 level of ₱824 million, connoting an annual increase of 30.0 per cent which should pull up the four-year growth average to 13.5 per cent from the period's end reading of 8.0 per cent. However, the share in NDP should hold steadily at about 3.0 per cent throughout the whole interval.

In all four years, the velocity of the construction pace may well supersede that of the NDP. This is understandable since increasing public infrastructure for transportation, power electrification, water resources, schools and hospitals, as well as induced private installations of buildings and houses, will undoubtedly propel a construction fever onward.

There is a linkage effect about construction that will make it unrealistic to expect declining activity. Public infrastructure construction, serving as catalyst to economic growth, also feeds into the level of private construction. Governmental concern over infrastructure projects is likely to continue undiminished for the period; and with the spill-over effects of these projects on private construction, scheduled construction targets should be easily achieved.

Public construction will remain high as the communication, power, water resources, highway, airport, railroad, portworks, school, and hospital infrastructures pursue their respective four-year programs.

5) Transportation and Communications

Transportation figures include the value added in utilities and telecommunications. Forecasts point to an FY 1975 output level of ₱1.3 billion from an FY 1972 value of ₱1.1 billion, with growth rate moving up from 5.0 to 6.0 per cent over the time period. The participation in NDP, however, should register a slight drop from 3.9 to 3.8 per cent.

The transportation system will remain to be a very significant stimulant to rapid economic development. The increasing growth in population, in commercial and industrial activities, tourism, and in the export and import trade, will certainly lead to an increased demand for transport and communication services. But even as infrastructures in the form of wider roads and new highways may help offset possible congestion, still operational efficiency in transport trade must be cranked up to cope with the exigencies of smooth economic progress.

a) Land Transport

Collectively, the planned activities are aimed toward the preparation of a more convenient transport-logistics. Railway rolling stock and wider highway networks need to be increased, as well as streamlined. Maintenance and improvement in both existing road and safety devices should not be carelessly overlooked.

b) Water Transport

The merchant marine will be encouraged to increase their acquisition of newer ships. In particular, liner services to new export markets have to be established, just as maritime colleges need to prune up on facilities and advance training courses.

Harbor facilties will have to be improved and expanded as seaborne trade multiplies, to prevent loading delays and queues from forming. This lowers port expenses and docking-time wastage. Also, additional harbors will have to be better designed and locational choices thoroughly assessed to optimize the traffic capacity in cargo-handling, receiving and loading.

c) Air Transport

The snowballing traffic created by increases of air passengers and freight demands greater safety in aircraft landings and take-offs. Airport improvements and navigational aids are essential to aircraft safety, just as telecommunications and weather-reporting systems are indispensable to airway traffic order.

The reliability of transport carriers ensures continued stability in internal and external commerce. This should bring up the value-added level in transport past the target range.

Telecommunications

The Nationwide Telecommunication Expansion and Improvement (NTEI) project, which is nearing completion, will provide a nationwide skein of telephone and radio connections with a full automatic telegraph relay system for Luzon and Visayas. Likewise, the Reparations Telephone Expansion Project for the city areas is expected to be completed within the Plan period. The updating of the urban telephone system calls for additional trunklines and long-distance circuits to meet hiked internal demand for communication services.

In addition, the Mindanao Telecommunication Development Project is being started for consequent integration with NTEI lines, and the GTS Expansion Project will soon be undertaken to supplement the communication network in metropolitan Manila.

6) Commerce

The level of commerce is estimated to rise from ₱4.4 billion in FY 1972 to ₱5.2 billion by FY 1975. Its percentage share in NDP is most likely to recede from 15.4 to 15.1 per cent. However, the growth rate for the four-year span should rise slowly from an initial 4.2 per cent to 5.7 per cent by FY 1975.

7) Services

Value-added in services will continue to grow in absolute terms from ₱6.6 billion to ₱7.5 billion in the four years covered. The growth rate of services will proceed constantly at 4.0 per cent through FY 1972 to FY 1975.

Since the growth rate of the aggregate economy will move at a much faster rate, the 'service' sector will slide down from 23.1 to 21.5 per cent. However, the target forecasts will retain the traditional relative importance of this sector to the whole economy.

CHAPTER 2

Reexamining the Economic Policy Framework: Agenda for Reforms

1. INTRODUCTION

The targets of the Plan, as specified in the preceding chapters, are attainable within the framework of economic policy reform. These reforms are essential for continuously effective performance during the Plan period and in the long run.

This chapter endeavors to discuss objectively possible reforms in certain aspects of economic policy, drawing in part from the experience of countries like Taiwan and South Korea which recently have been experiencing growth rates in real output exceeding 10 per cent annually. The primary task is to examine how the development objectives set forth in Chapter 1 would be advanced by such reforms. A recurring theme is that increasing the degree of economic freedom and the reliance on the market mechanism in the allocation of products and resources is desirable. The necessity of exploiting more fully the economy's comparative advantage in labor-intensive industries will also be underscored.

The suggested reforms contained in this chapter are sometimes only broadly discussed; later chapters on specific sectors will pursue the essential ideas with proposals for legislative action. The challenge remains that these reforms have to be transformed into concrete legislative pieces, and here congressional responsibility is warranted.

It is anticipated that some of these policy reforms might meet strong resistance in both legislative houses, because of the usual political expediencies. This has been the case in the past. Yet it is believed that unless continued insistence on facing the problems unemotionally is pressed, objective long-run solutions will never be obtaining from the sugar-coating palliatives that try to cover up the real sores of the economy.

It is contended that these reforms present the best solutions to many economic dislocations; but unless Congress is willing to give a free hand, the unfortunate recourse would be to turn to second-best alternatives, on which the present plans work.

2. WAGE POLICY

In 1951, the first minimum wage legislation affecting industrial and agricultural workers was passed. Since that time, two major changes have been adopted by legislation, in 1965 and in 1970. An accompanying increase in social security and other benefits has also characterized labor employment over the years. The effect in both cases is clearly an increasing cost of hiring workers, especially in the more organized production activities which also have been subject to increasingly stronger union pressure over the years.

It is easy to see that direct benefits accrue to already employed laborers earning the previous minimum wage rate. However, this should not lead one to conclude that income redistribution has been effected favoring the laboring class as a whole. The Department of Labor gives a round figure of one-half million laborers benefiting from the 1970 minimum wage hike. This represents less than 4 per cent of the total labor force. Two classes of laborers are in effect penalized: (1) those earning lower than the minimum wage, conservatively estimated at 60 per cent of the labor force and normally to be found in unorganized production activities, who will find it more difficult to be employed in the large enterprises (which, because of the increased wage cost, will substitute capital for labor to some extent); and (2) those receiving more than the minimum wage rate, mostly skilled workers, whose earning power is made less distinguishable from the common laborers. In a country where the acquisition of labor skills ought to be given a premium, the reverse condition is seen to be realized with a high minimum wage policy. At any rate, it is clear that a more equitable distribution of income as a policy objective will not be advanced, considering that 60 per cent of the labor force will be farther away from gainful employment in the large enterprises.

For a labor surplus economy such as the Philippines, international comparative advantage presumably lies in labor-intensive goods due to the lower cost of labor. These goods have been generally the strength in foreign trade of economies like Hong Kong, Taiwan and

South Korea which flourished under a setup of low wage policy and whose labor forces have not been protected by high minimum wages. (These countries are now in the next stage, where wages are substantially higher relative to Philippine wages.) Maintaining a high minimum wage policy weakens the competitive advantage of export-oriented industries over foreign producers and hence discourages the development of the export sector of the economy. It is probable that the artificially high cost of labor is significantly responsible for the organized sector's orientation principally toward the domestic market.

A high minimum wage policy leads to a substitution of capital for labor where feasible. Thus, it may be expected that large enterprises will (1) shift to more capital-intensive processes in existing industries and (2) choose to engage in industries favoring more capital per unit of labor. This situation clearly runs counter to the fundamental objective of providing maximum employment to the population, given the limited domestic savings (that are in effect being dissipated). Output growth as an objective is also not being served by a high wage policy under such economic climate.

Sometimes, managerial resistance to a large size of labor inputs has been blamed more on probable union walkouts than on high minimum wages. Yet even then, the pricing of labor resources will definitely play a large part in determining the appropriate employment size for skirting unionism mischief.

What can be done to reform the present high wage policy? One must accept that lowering the minimum wage is politically infeasible. But a conscious government policy not to widen the current gap between the minimum wage rate and the market rate is imperative. An examination of labor laws which have implications on total employment and other national objectives should be made. For instance, present regulations concerning overtime pay and hours of work need to be revised to widen the scope of employment and income earnings in relevant production activities as done, for example, in Singapore.

More to the heart of the matter is for industry-wide wage differentials to be permitted to reflect differences in industrial labor productivity and employment conditions. The recent organization of the Wage Commission gives clear recognition of the policy of industry-wide wage fixing through collective bargaining before a government board.

Finally, local government should be given autonomy in setting minimum wage rates. Since the cost of living index varies among different regions (in fact, even among different cities in the same region), minimum wage rates, if they are to be fixed at all, must depend in part on the place of work. Competition by local governments will make for a realistic wage-setting and provide greater leeway for regional development. The details must be worked out, needless to say, in consistency with the national goals.

3. INTEREST RATE POLICY

The Usury Law, enacted in 1916, provides interest ceilings for two types of credit, viz., secured loans and unsecured loans. In actuality, credit varies in maturity, in degree of risk and in form. There are in addition two types of credit supplier—the organized financial institutions and the unorganized body of private individual lenders.

The Law covers direct lending only. Because no distinctions are made on various collaterals and maturities, more risky and longer term credit which would normally have higher interest rates is being discriminated against.

As a developing economy, the Philippines has still a substantial unorganized market for both goods and credit. Farmers borrow from their landlord and middlemen. Individuals in general borrow from each other and from pawnshops (which are found in both small and big cities). It is not easy to implement Usury Law against these scattered uninstitutionalized money lenders. The interest is sometimes hidden in the form of price differential between sale made on credit and sale made on cash.

For direct lending in the organized market the Law is being circumvented in the form of service charges and other arrangements such as deducting the interest for the year at the release of the loan rather than at maturity, redepositing the loan proceeds in the same bank, etc.

In both the organized and the unorganized credit markets, violation or circumvention of the Usury Law can only be expected in view of the scarcity of loanable funds being supplied at the legal interest rate ceiling.

In the pursuit of development goals, great pressure is exerted on the capital market to supply savings and to allocate available capital funds efficiently. The Usury Law only serves to obstruct the functioning of the capital market. The most adversely affected are the commercial and rural banks which are covered by the Law as well as by Central Bank regulations on saving and time deposits. Clearly, these banks must replace the unorganized personal creditors representing a large segment of the capital market for a more ef-

fective mobilization of domestic savings. As the organized sector of the capital market expands, more varied earning assets are made available to savers and wealth holders, thus discouraging hoarding and the holding of jewelry, idle land and other traditional forms of assets. More savings being channeled to the financial institutions means that more capital funds will be available to finance investment.

The artificial lowering of the cost of capital dictated by the Usury Law has resulted in an excess demand for capital funds. As might be expected, capital rationing has been resorted to. The granting of credit then became vulnerable to corruption and nepotism. If bribery were involved, an allocation of credit would be biased toward large projects since for the same amount of work involved in processing an application, the underhanded side payment is bigger the bigger is the loan. Oftentimes the lending criterion gave greater weight to collateral than to the economic feasibility and returns of the projects. Thus, it has been possible to deflect the actual use of the funds from the project for which it was originally intended. The artificial lowering of interest rates has therefore benefited some investment projects that were low in the priority list, resulting in an inefficient allocation of funds if the priority list in fact met development objectives.

A further consequence of the low interest policy has been the encouragement of processes and industries which are relatively more capital-intensive than those suggested by the given factor endowment. The implications of such a situation in terms of the national objectives have been discussed in the preceding section on wage policy. It suffices to state here that the high wage policy and the low interest policy represent two aspects of current economic policy which are incompatible with the national goals. Reforms are therefore necessary in both cases. In the case of interest policy, a multiple interest rate structure might be devised in consistency with the directions of the preferred production activities, e.g., export-oriented industries and agricultural loans designed to foster rice and other foodstuff production.

The recent experience in South Korea, Taiwan and Indonesia strongly supports the contention that freeing the rate of interest from a fixed ceiling or simply raising the maximum legal rate leads to desirable economic changes. The establishment of financial institutions to replace the unorganized capital market will definitely be encouraged. In turn, the base of monetary and credit policies will be strengthened and thus make for a stronger implementation of such policies.

A realistic interest rate policy will enhance the desirability of securing soft international loans and supplier's credit on account of the higher rate differential. Development assistance in the form of soft loans (that is, at low interest rates and long periods of maturity) will still be desirable and consistent with a realistic market setting of interest rate policy. This would represent an additional incentive to prospective investors previously hesitant to avail of such devices. The inflow of foreign capital will further be augmented by the increase in capital funds from abroad which are coursed through usual monetary channels.

The only adverse effect of a higher interest rate would seem to be the increased cost of credit to farmers and the small-scale producers normally in need of financial assistance at some stage of their production activities. The argument has been given earlier that more often than not they have to resort to the unorganized credit market in which the Usury Law is nonoperative anyway. But if it is deemed desirable to extend liberal credit terms to them, a lower interest rate structure may be applied as a direct subsidy.

4. TARIFF POLICY

The strategy of import substitution in the fifties has appropriately turned to the tariff as a protection for the new industries against foreign competition when the exchange and trade controls were released. One would think, however, that the overly protective tariff system set up at the time has already nurtured the infant industries to maturity by now.

The present tariff policy still features a very complicated and protection-heavy structure. One summary tabulation (November 1970) of tariff rates reveals the existence of 16 rate intervals applied to over 1,600 commodities that are classified under some 21 import categories. Estimates for the import-substituting sector show that the protective nominal tariff rates range from 10 to 250 per cent, covering over two-thirds of all the imported commodities in the table. The distortionary effect on product and resources allocation (and hence on economic efficiency) of such tariff structure must be presumed to be substantial.

Social standards dictated that imported essential goods, like raw materials and intermediate products for the import-substituting industries, enjoy very low tariff rates. Non-essentials were subjected to prohibitively high ones, resulting in high domestic prices, naturally. In effect, domestic production of non-essential goods (substitutes for the expensive imports) became economically attractive. Domestic resources were allocated heavily therefore to the production of

non-essentials, which registered enormous profits. This development made the import-substituting industries highly dependent on imports for their raw materials. In short, the tariff policy has led to an industrial structure which produces non-essential goods and imports the essentials.

Expectedly, the export market became less attractive as domestic demand for the highly priced non-essentials increased. Thus the development of the export sector was stunted on account of the tariff policy, among others. Artificially high returns favored investment in ineffective dollar-earning industries, contributing to the difficulty in matching foreign exchange inflows to outflows, i.e., in attaining the objective of external balance. Considering that the export industries are labor-intensive by virtue of our comparative advantage, employment as an objective variable is not being maximized.

The recent "floating" of the exchange rate was meant to seek the equilibrium rate at which domestic demand for foreign goods would balance foreign demand for Philippine goods. The complicated tariff setup militates against finding such level of the exchange rate because of the difficulty in evaluating the extent of economic distortions arising from the varying magnitudes of the tariff rate.

Two problems in customs administration are direct consequences of the present tariff policy, viz., smuggling and misdeclarations. The dangers involved in these illegal activities get overbalanced by the windfalls earned once the commodities reach the domestic market. It is possible that only legal importation has been discouraged by the high tariff walls, but not actual importation. (Official foreign trade statistics then become unreliable as a basis for policy formulation.) It should not come as a surprise therefore that tariff revenue has amounted to less than 10 per cent of ad valorem imports in the last ten years.

The complicated tariff structure is also conducive to corruption in customs administration. Arbitrary assessment by capricious tariff officials makes for the possibility of amassing easy fortunes. It is also well-known that the salary of customs officers are supplemented several times over by their earnings in under-the-table transactions with unscrupulous traders who have their own illegitimate interests to serve.

Recent policy measures have taken a big stride in the promotion of export-oriented industries utilizing the country's abundant resource labor. High wage rates and low interest rates continue to discriminate against such industries as discussed in the two preceding sections. The present tariff structure which is inherited from the import-substitution stage of our development has also been shown to be incompatible with the intermediate objectives being aimed at currently.

The realities of world trade call for a less drastic policy change than removing tariffs completely. A gradual approach toward a uniform tariff on most imported goods plus no more than three supplementary rates for the protection of infant industries is desirable. Moreover, a definite timetable for the withdrawal of tariff protection seems necessary to prevent such forms of subsidy to harden into vested interests.

Finally, a word on the revival of Presidential tariff negotiating powers may be made. Once tried for a five-year period between July 1, 1957 and June 30, 1962, this power has been used only twice. During its implementation, tariff rates were simultaneously revised rendering such power temporarily redundant. As such, its true effectiveness has not been really tried.

The obvious advantage of such powers residing in the executive is the avoidance of bureaucratic delay, especially in emergency cases. Independent of legislative interference, it would expedite tariff adjustments and negotiations deemed beneficial to trade expansion, the balance of payments, development objectives, and probable reduction in smuggling from established routes, without having to pass red-tape procedures and congressional lobbying pressures that stall urgent decision-making.

The built-in safeguards, of course, remain intact with prerequisites like adequate prior investigation by the Tariff Commission and proper recommendation by the National Economic Council.

5. FOREIGN INVESTMENTS POLICY

There is need to look more closely at foreign investments policy, with a view to liberalizing some areas and closing others. In a host of legislative pieces (the Investment Incentives Act, the Export Incentives Act, R.A. 5145 on the regulation of investments with an equity participation of at least 30 per cent, and more recently the Foreign Trade Zone Law), the responsibility for directing and regulating foreign investments has fallen to different economic bodies, principally the Board of Investments.

The unique nature of the demand for short-term credit (used particularly to finance short-term obligations and day-to-day business transactions) merits its separate classification from long-term credit. And in legislating about credit availment by foreign companies, the discussion must be clear on just what type of credit is being covered. Providing short-term credit to business firms — whether owned by Filipinos or foreigners

— must be considered a necessary banking function. Where legislative action seems warranted is in prohibiting the use of short-term credit by foreign-owned companies for remittances and dividends.

Another policy area directly related to foreign investments in certain export activities has to do with the requirement that companies wanting to avail of export incentives, either through the Export Incentives Law or as undertaken by the BOI, have to limit foreign participation in equity to at most 40 per cent. This is a restrictive policy that does not seem to serve the development goals. When a company goes into export, the market to be exploited is not part of the domestic economy. The exporting company utilizes local factors so that it can make business abroad, contributing in the process to redress the imbalance in our foreign trade. There is no justifiable reason therefore why we should put a ceiling on the equity participation of companies enjoying export incentives. In fact, the opposite case can be argued in terms of the national objective that companies, whether joint ventures or 100 per cent foreign, be invited to the Philippines to set up factories provided that their sales are made abroad.

What should be regulated are activities whose export-orientation is limited only to a particular area. One way of getting around this problem would be to see to it that companies, whose export-sales account for about 90 or even 80 per cent of total sales, are able to enjoy all the benefits derived from export-orientation, and that companies within the foreign trade zone can be 100 per cent foreign.

With respect to inviting 100 per cent foreign-owned companies into the foreign trade zone, the important qualification must be made that the financing of such investments does not entail long-term credit availment from domestic banks, especially development banks. Otherwise the entry of such companies will only be straining the demand for loanable funds in Philippine banks which, as it is, already falls very much short of supply. This is, incidentally, the only valid issue for Filipinizing credit — from the standpoint of long-term credit.

It is necessary to make the final point (relating to **both** foreign and domestic investments) that quite a number of present investment incentives serve unwittingly to encourage purchases of capital equipment rather than the employment of labor. Such forms of incentives must be reexamined and possibly replaced by inducements for producers to engage in more labor-intensive techniques. Thus, even if we are able to remove some of the bias of present policies against labor employment through wage and interest rates reform, it would still be desirable for consistency with national goals to generate supplementary incentives that will impel preferred investments to the maximum employment of labor.

6. EXPORT POLICY

Some important steps have been taken in the last two years which deliberately re-oriented development policies toward the active promotion of export industries. The most significant decision affecting the export sector was the adoption of the floating exchange rate in February 1970. In the same year the Export Incentives Act (of 1970) was enacted, which was preceded the year before by the creation of the Mariveles Foreign Trade Zone.

The Export Incentives Act for the 1970's provides definite encouragement to production and trading for export. Registration of an exporter or trader with the Board of Investments allows the firm preferential interest rates and very extensive tax privileges. In addition the government has simplified the procedure of exportation.

Another attempt to encourage export industries is the establishment of the Foreign Trade Zone. The law plans to encourage export production in this zone. This would result in the concentration of some specialized export activities in a limited area. The incentive will be in the form of physical administrative facilities for foreign trade that would be more efficient than those provided in existing ports. However, it will take time to build these facilities, and this project is not expected to begin operation until several years from now.

Some of the issues related to exports policy are intertwined with industrial policy affecting foreign investments. This has already been discussed in the previous section.

Careful examination of the present legislative proposals affecting exports will reveal the absence of export incentives concerning the provision of short-term credit to exporters. Financial assistance granted so far relates only to the long-term capital requirement of export producers. A necessary complement would be to provide incentives in the form of easier access to short-term credit required to finance working capital associated with the production process. Without it, there is danger of extensive undercapacity utilization.

As things stand, current policy does not encourage commercial banks to lend more liberally to exporters, or more can be done by policy, given present conditions. There are no facilities to expedite the processing

of their short-term loans, and the same types of collaterals are required of exporters as of other businessmen. While a lower rediscount rate to loans for exports exists, this privilege has not been availed of to any significant degree by the commercial banks; some studies are currently being made on why this has been the case. It is possible that a policy permitting or encouraging banks to accept export contracts and similar papers for discounting will make such a measure more effective. Indeed any form of inducements toward credit liberalization to export-oriented industries, especially those with excess capacities, would be desirable. At present, whenever credit tightening is applied, the effects on the private sector tend to be felt across-the-board — except perhaps in the case of the traditionally established export sectors which avail of present differential incentives to exports.

In Japan and South Korea, for example, exporters are allowed to use export orders on contracts as a basis for borrowing from banks. Moreover, their central banks grant rediscount privileges on loans secured by these papers depending on the status of the export contract — whether it is still in the stage of export order or whether it is already being shipped. Such differential rediscounting facilities, especially in Taiwan and South Korea, are rendered more effective because of realistically high rates of interest. A system of differential rediscounting as well as guarantees on export orders on the part of the Central Bank could easily be systematically devised. Better yet, the creation of an export bank to handle such specialized banking functions should be seriously considered.

There is another aspect of export policy which seems to merit close attention at this time. Few will deny the significance to our export-oriented industries of an effective program for export promotion and other activities leading to initial marketing contracts abroad. The fixed cost of such undertaking appears very high, especially to small industries not yet exposed to the vagaries of world acceptance, which may deter prospective exporters from reaping the long-run benefits offered by foreign trade. Since economies of scale as well as external economies are involved in setting up such program, it is necessary for the government to share in its financing and participate directly in its operation. Clearly, the smaller enterprises desiring to go into the export business will find the foreign market more accessible, where before they were barred due to lack of adequate promotion funds. The need for an effective export promotion program is most pressing at this time when our export industries are being stimulated by recent policy measures providing incentives for their accelerated development. It will be unfortunate if export opportunities are jeopardized only because marketing outlets abroad have not been established.

There was very recently approved a plan to create a Philippine International Trading Company, "which will serve as the central clearing house for bulk trading and centralized financing to improve foreign trade." Some of the problems touched above, relating to short-term financing and marketing, may reasonably be expected to be dealt with properly in such institution. It is hoped that its effective operation will be realized very soon and will not run over time into administrative difficulties.

7. IMPORT POLICY

It has been suggested from time to time, even by some knowledgeable persons occupying high positions in industry and government, that a complete ban on imports of luxury goods is necessary to avoid wastage of foreign exchange (admittedly a very scarce resource). Such concern for a more economical use of foreign exchange, however, seems misplaced in that the objective of external balance is elevated to a position of utmost importance. It is true that luxury importation eats into our scarce supply of foreign exchange, but totally banning it is liable to produce distortions in the allocation of another scarce resource (capital) of such magnitude as to entail an enormous sacrifice in terms of the more fundamental goals of economic policy.

One need only recall the unfortunate consequence of the import control measures of the fifties to realize the folly of a complete ban on luxury importation at this time. The immediate result would be the bidding up of the prices of luxury goods in the domestic market. Unless a similar restriction is implemented on the domestic production of import-substituting luxury goods, domestic producers will be encouraged to exploit the market for such high-priced luxury goods. An industrial structure biased toward the production of luxury goods can be expected therefore from a policy banning luxury imports. This would tend to set back current efforts in promoting the development of export industries and in directing investments to areas of high priority as specified, for example, in the Annual Investment Priorities Plans. The presumption must be that an import ban on luxury goods is incompatible with the policy measures recently adopted and, hence, inconsistent with current intermediate objectives.

Luxury consumption and other forms of ostentatious display of wealth are inimical to economic growth at this stage of our development. Not only are they inde-

fensible on economic grounds. They are, on social grounds, condemnable in view of prevailing income disparities among our citizens. If imports of luxury goods and other non-essentials are deemed not desirable, the only way a total ban on their importation will work without jeopardizing development goals would be to impose also a complete ban on the domestic production of similar goods. This would seem a rather harsh measure to follow.

Actually, an alternative solution exists to discourage luxury consumption while at the same time avoiding the drawbacks of the import ban. This is the imposition of high excise/sales taxes on **both** imported and domestically-produced luxury items, a certain degree of which is already in force at present.

An import ban by itself only enhances the profitability of domestic substitution and does not assure the lessening of local consumption. In such case the government does not even take a cut in the profits of domestic procedures. If the reasonable assumption is made that the rich will always find a way to consume what they want to consume (e.g., luxury goods), the government will be better off participating in every sale of a luxury item via the excise tax.

The tax on luxury consumption raises the buying prices of the commodity to the consumer. The domestic producer, however, will not be benefited with a higher selling price. The attractiveness of luxury goods production relative to those activities on high priority officially will therefore diminish.

8. TAX POLICY

Recently, the government achieved a breakthrough, albeit temporarily, in boosting total tax effort. The usual proportion of total taxes to GNP has been in the order of 11 to 12 per cent. Last year, the approved export tax, along with collections from social security and social insurance contributions, raised the ratio to as high as 14 per cent. By the general standards of developing countries this measure is still low. And if there is a gradual disappearance of the export tax through 1974, present efforts are bound to decline. The result will somehow freeze development infrastructure so vital to national productivity. The need, then, to generate more revenues for development projects becomes a question of national survival.

The present Plan makes clear that if the tax base were restricted to the present coverage, resources would not be adequate to meet development targets. First of all, the increase in the current account bloated by expenditures due to rehabilitation from recent natural calamities, by the upward adjustment of minimum wage rates, and by increased security requirements arising from civil disturbances and symptoms of internal subversion, will eat into the capital budget and threaten the development schedule. In addition, the cost of governmental operations (especially on capital account) plus the amount of counterpart requirements to foreign-aid programs have increased in peso terms.

One non-inflationary way of generating the necessary additional funds is through taxation. Some tax proposals, now awaiting approval in Congress, are directed principally towards collecting additional dues from the well-to-do, e.g., heavier taxation on wealth beneficiaries and luxurious consumers. Affluence remains the tentative scapegoat because one cannot expect substantial gains in tax collection if additional tax burdens were to fall upon people whose bare necessities cannot even be met. The gaping inequity in the present setup of income and wealth distribution dictates that the additional tax payments must come from the richer members of society.

In taxing affluence on equity grounds, however, there is the danger of killing entrepreneurial initiative. Prohibitive rates, when imposed indiscriminately, are liable to discourage individual efforts to maximize productivity. Because of the enormous monetary sacrifice involved, this may also worsen the tax evasion problem. To some extent, even foreign capital as well as domestic savings might be diverted to those countries where the tax climate is more favorable. In effect, not only will the tax base diminish but also, and more fundamentally, the development goals might suffer a setback. For this reason, the investment incentives package which was adopted recently features tax exemption privileges to preferred areas of investment.

On the other hand, there too is a valid case against overextended tax holidays, especially in the case of economically feasible projects enjoying tax exemptions whose viability would have remained unimpaired even if subjected to taxes, legally forefeited by government. This task of balancing the costs and benefits of an additional tax burden in terms of the national objectives rightly fall upon fiscal policy-makers.

The tax structure has often been accused of regressivity. This charge may have been influenced by the high incidence of indirect taxation. However, this is misleading because the coverage of indirect taxation has increasingly been enlarged to include luxurious consumption. By their very nature, luxury taxes only apply on those with the ability to pay, namely, the affluent.

Unfortunately, one feature of many luxury taxes has been their import fixation which overlooks locally pro-

duced luxuries. This renders the tax progressive at the import side mostly, not at the domestic end.

It is true also that if excise taxes on petrol, tobacco and alcohol, which have proven to be very convenient and effective fund-raisers, were removed from the tax systems, the element of progressivity would be more pronounced. These indirect taxes can be thought of, then, as simply the penalty price of disease-inflicting social vices which the health program would like to see minimized.

In any case, the low tax quotient dramatizes the need for making indirect taxation more productive for revenue and funding purposes. The fact that the ratio of taxes to Gross National Product climbed to 15 per cent in 1971 is not enough to warrant optimistic expectations. As mentioned, the Stabilization Tax (export tax), which is primarily responsible for the impressive ratio, features diminishing rates that totally disappear by 1974, at which time the ratio would have dropped back to previous levels.

As it is, with stabilization tax and all, total receipts do not accrue entirely to the government. So-called special funds are channeled back to the private sector (e.g., 25 per cent of export tax proceeds are surrendered to the Development Bank of the Philippines specifically for export financing purposes) and out of government reach.

This cut in the export tax is just one of many such special funds. The proliferation of many other types considerably holds up government operations, and such tie-ups cramp the flexibility over resource-use. Thus, the excess from special funds become hopelessly unused while under-financed priority projects remain frozen. The popular arguments for the legislation of special taxes stem from the widely-accepted "benefit-principle" — i.e., "they are taxed, who benefit", or conversely, "they benefit, who are taxed". The prevailing mood in Congress is to render any new tax suspect until exact use of the funds has been specified. In effect, what is approached is the second-best solution — tying up new funds to pre-assigned cases.

Also, the tax effort ratio tends to be overstated. The amount of total taxes used in computing the ratio includes the receipts of local governments, over which the national government exercises no control. These receipts have to be deducted from total revenue to arrive at a more accurate gauge of net discretionary resources accessible to the national government.

The history of development suggests that most countries depended heavily on non-discriminatory taxation for the generation of initial revenue. Subsequent progress would release this strong reliance as more and more legal entities fall under the teeth of progressive taxes and supply government with larger revenues. The Philippines is most probably at that stage where indirect taxes still have to play some importance for revenue purposes. But as more families move into the base coverage of progressive taxes, maybe the latter should gain increasing attention.

In support of its development activities, the other alternative open to government may be to borrow externally. This is sound practice for capital development when applied in relatively well-studied amounts. But if borrowings grow big enough and over-excite public anticipations, inflation may occur with its deteriorating effect on the balance of payments. In this case, the Central Bank may be forced to restrict private credits in order to forestall any unnecessary inflationary pressure. Thus, the growth of the economy may be hampered by this squeeze on the private sector.

Another argument against additional borrowing is that it will only aggravate the debt service situation with heavier interest payments. Therefore, for all intents and purposes, the choices narrow down simply to a higher taxation quotient and a faster rate of development, or lesser development with low tax levels. The recent improvements in tax collection have certainly increased government revenue from taxation, but this has not been enough to meet the rapid expansion of government expenditures, especially on development projects. In short, in spite of increases in public revenue, budgetary deficits have appeared as public expenditures have risen faster.

Therefore, hikes in tax receipts provide the only answer if plans about future development are to be realized. Failure would mean that development efforts on the part of government will suffer from lack of resources for capital outlays and that the private sector will, to a more painful extent, have less resources available for commercial activities and industrial expansion, or both.

9. EXPENDITURE POLICY

The manner in which the government spends limited available funds wields a tremendous impact on development targets. For example, public capital outlays in the form of social overhead investments in agriculture and natural resources are highly fruitful in that private profitability in these areas generally understate social desirability. In contrast, excessive public consumption may lead to price inflation and deter potential output; considering that certain services (e.g., public health and sanitation, water supply and sewerage, peace and order, etc.) are essential to the well-being of the populace,

the balance which yields maximum social benefits must be strived for.

One long-run objective for which expenditure policy (like tax policy) may be a especially-suited instrument is the equitable distribution of income and wealth. This matter assumes timely significance because at no point in our history has the severity of income inequality so bothered the social conscience.

The tools of fiscal policy can undoubtedly influence income redistribution. In the preceding section it was suggested that, in view of development requirements, tax reforms should generate increased receipts from the higher income bracket. But the redistributive effect of such an action will be assured only if developmental expenditures are purposedly used in uplifting the economic location of those at the lower end of the income stratum. For this reason, it seems desirable for purposes of fiscal policy to regulate the allocation of the additional tax proceeds with a conscious view of alleviating the conditions of the lower-income class. Otherwise, there is danger of having such funds diverted to less beneficial uses.

There are some public projects contained in the current Development Plan which merit priority attention by virtue of their powerful redistributive effects. These include:

A. Low-cost Housing

The housing program of the government should in general provide financial assistance to homeless families without effective purchasing power. Since the void is greatest among the lowest income families, the redistributive effect of a massive low-cost housing program (which may take the form of direct subsidy) is evident.

B. Rural Electrification

Due to substantial economies of scale, electric energy supply is considered a natural monopoly. In the rural areas, direct government subsidy seems necessary to realize widespread electrification. The urgency of such a project is suggested by the fact that to date only 5 million people benefit directly from electric services of public utilities. It is highly probable that rural electrification may yield future dividends in terms of increased secondary and tertiary activities in those areas.

C. Agricultural Reforms

The recent achievements in agriculture made possible by technological innovations may not redound to the benefit of farmers in general if land redistribution and improvements in the tenure system are not accelerated. There is increasing evidence that farmers now respond to economic incentives if proper opportunities are given them. Therefore, the availability of main and feeder roads, irrigation water, and fertilizers-chemicals necessary to fully implement the "Green Revolution" should be of primary government concern. Likewise, efficiency in distribution and marketing, as well as proper diversification into other agricultural products, should be sought to complement output gains in certain crops. It is necessary for the government to undertake these investments in view of the social benefits derived. Indeed, subsidy to the general low-income farm families may eventually pay off in terms of attaining the development objectives besides income redistribution.

10. RICE PRICE POLICY

The government, through the Rice and Corn Administration, has been actively engaged in a program to support the prices of palay and rice. Under R.A. 4643 rice producers are to be guaranteed a price floor of ₱16 per cavan of palay at RCA designated collection centers or bonded warehouses; the consumers are guaranteed that rice purchased by the RCA will be available through authorized agencies at a ceiling price of ₱1.40 per ganta.

Rice is a staple in the Filipino diet and its production is of a seasonal nature. Hence it is indeed necessary to regulate the possibly large seasonal fluctuations in the price of rice, and there should be no question about the desirability of the price stabilization function of RCA. The price support law, however, can be criticized in setting **fixed** floor and ceiling prices which cannot be expected to remain realistic in the face of an increasing trend in the prices of other commodities. An additional consideration is that the domestic price must be brought closer in line with world prices to be able to rationalize eventual surplus production for export. To permit required flexibility over time, the legal prices should be made subject to adjustment by a competent authority from time to time. Such prices must be set in accordance with a flexible pricing base, rather than fixed absolutely by law. Without this flexibility, losses by the price stabilization agency will continue as they have in the past when market conditions changed but corresponding floor and ceiling price adjustments were made impossible by legal rigidities.

To minimize the drain of scarce government funds, it is desirable to maintain a sufficient differential between the floor and ceiling prices to minimize the need to subsidize a price support and buffer stock

program. It would also be desirable to shift as much of the financing to the private sector as is possible without weakening the program's effectiveness.

Price setting will then begin with the establishment of a floor price determined to bring forth the required production response. This price should be announced at least 2 months in advance of each major planting period and maintained through the relevant harvesting period if it is to have the desired effect. Given the usual marketing margin, the corresponding price of rice at harvest season can be determined, with the spread between floor and ceiling just covering marketing costs. The ceiling price for the high-price period before harvest time will then exceed the rice price at harvest time sufficiently to allow for costs of holding for the average holding period of approximately 5 months. If the spread is less than these holding costs, private merchants will find trading unprofitable and the government would be forced to assume an undesirably large marketing responsibility.

Under the above policy, the price stabilization agency would be required to provide the institutional arrangements such that the farmer could sell his palay (or obtain a loan against it if he wished to delay final sale) at the floor price. At the high price season, the agency would be responsible for suitable market injections to keep the retail price in Manila from exceeding the ceiling price. Floor and ceiling prices in other major rice distribution centers will be related to those in Manila by a difference not greater than the cost of transport. Similar relationships will exist between distribution centers and their trading areas.

Such stabilization requires a buffer stock spread appropriately around the country so that market injections can be made expeditiously should the price rise toward the ceiling. Total buffer stock can vary seasonally with a minimum at the time of harvest and a maximum as the pre-harvest period approaches. In a year when early production forecasts indicate an above normal production, high quality rice can be exported soon after harvest. If the early forecast is later proven incorrect, common rice can be imported later in the season at lower prices.

The above recognizes that the price stabilization agency cannot in a normal year cover the costs of holding its base buffer stock. This cost, together with the administrative overhead, will have to be included in the annual budget. In years of below average production, savings will accrue that should be held to balance extraordinary holdings costs or costs of stock turn-over in years of better than average production. If exports can be made advantageously in these years of surplus, such budgetary costs can be minimized.

Apart from the purely price stabilization function (to dampen seasonal fluctuations), there is no valid sanction for government control of the price of rice. The rationale for lower prices to consumers seems based on equity grounds. Since the expenditure for rice represents a larger component of the budget of low-income families, government subsidy in the form of a lower rice price effects an income transfer from the bigger taxpayers to the lower income groups. On the other side, a high rice price may stimulate production and increase the income of almost 25 per cent of the population receiving their livelihood directly from rice farming. In either case income redistribution as a policy objective is served.

If government subsidy to rice producers has to be made, it would seem more efficient to subsidize the input side of rice production. Instead of offering artificially high buying prices for their rice output, producers may be given direct benefits in reducing production costs, e.g., making available at low cost irrigation water, fertilizers and chemicals. Similarly it is possible to think of more efficient ways of effecting income redistribution in favor of the lower income groups than an artificially low ceiling price for rice consumers.

The final point must be made that changes in the price of rice are likely to impinge on the other sectors of the economy. Hence the costs and benefits of any form of price support policy doing more than just the stabilization function can be evaluated only in the context of the entire development effort.

PART II

Macroeconomic Framework

CHAPTER 3

Macroeconomic Model of the Economy and the Development Plan

In this chapter the Plan's macroeconomic frame of reference is presented and the consistency of the various targets shown, together with the projections for the Plan period of other macroeconomic variables. Any development plan will remain a mere statement of national economic aspirations if its objectives are not shown to be at least feasible. In the present case a macroeconomic model of the Philippines is utilized in considering the inter-relationships among the aggregative variables and the constraints they impose on the choice of development targets over the period from 1972 to 1975.

1. A MACROECONOMIC REPRESENTATION OF THE PHILIPPINE ECONOMY

There seems little need to justify the use of a macroeconomic model in planning at the aggregative level since it is increasingly becoming standard practice. The essential task of macro-planning is to be able to indicate the behavior of macroeconomic variables over the Plan period under certain assumed conditions. Clearly, some empirical knowledge of how such variables are related would be essential in defining the range of feasible values of policy variables and the possibilities open to the planners relating to the "target mix," given that trade-offs and complementarities among target (objective) variables exist. A macro-planning model also serves to tie up the sectoral plans into a coherent whole—which is a necessary part of the planning activity.

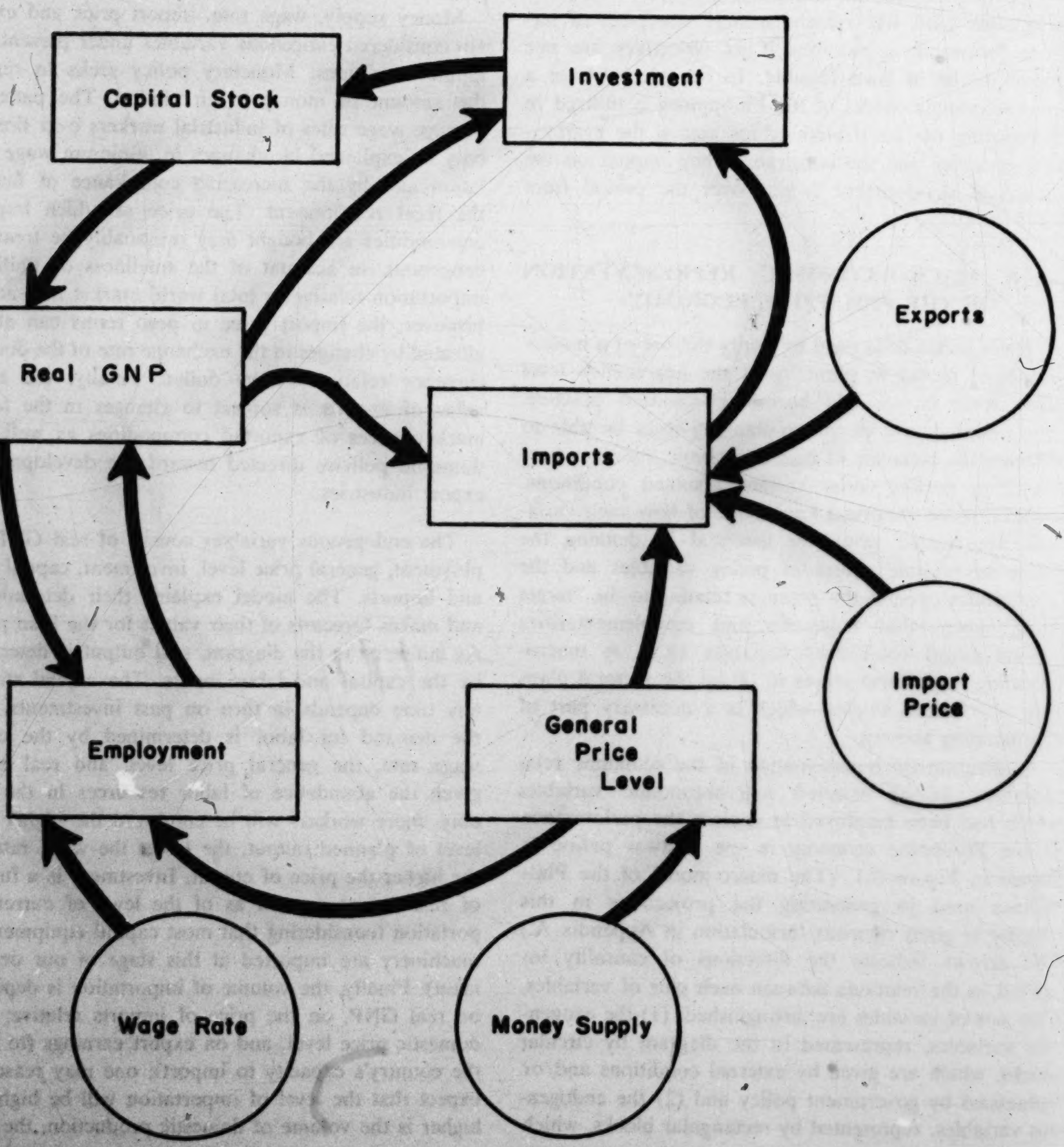
A diagramatic representation of the economic relationships among selected macroeconomic variables which had been employed to explain the performance of the Philippine economy in the postwar period is shown in Figure 3.1. (The macro-model of the Philippines used in generating the projections in this chapter is given rigorous formulation in Appendix A.) The arrows indicate the directions of causality involved in the relations between each pair of variables. Two sets of variables are distinguished: (1) the exogenous variables, represented in the diagram by circular blocks, which are given by external conditions and/or influenced by government policy and (2) the endogenous variables, represented by rectangular blocks, which are determined from the model given the values of the exogenous variables, their behavior over the Plan period being a central significance in the development plan.

Money supply, wage rate, import price and exports are considered exogenous variables under present Philippine conditions. Monetary policy seeks to regulate the amount of money in circulation. The pattern of average wage rates of industrial workers over time can only be explained by changes in minimum wage legislation and by the increasing compliance of firms to the legal requirement. The price at which imported commodities are bought may reasonably be treated as exogenous on account of the smallness of Philippine importation relative to total world market transactions; however, the import price in peso terms can also be affected by changes in the exchange rate of the domestic currency relative to the dollar. Finally, the money value of exports is subject to changes in the foreign market prices of exported commodities as well as to domestic policies directed toward the development of export industries.

The endogenous variables consist of real GNP, employment, general price level, investment, capital stock, and imports. The model explains their determination and makes forecasts of their values for the Plan period. As indicated in the diagram, real output is determined by the capital and labor inputs. The capital stock at any time depends in turn on past investments, while the demand for labor is determined by the current wage rate, the general price level, and real output; given the abundance of labor resources in the economy, more workers will be employed the higher is the level of planned output, the lower the wage rate, and the higher the price of output. Investment is a function of real output as well as of the level of current importation (considering that most capital equipment and machinery are imported at this stage of our development). Finally, the volume of importation is dependent on real GNP, on the price of imports relative to the domestic price level, and on export earnings (to reflect the country's capacity to import); one may reasonably expect that the level of importation will be higher the higher is the volume of domestic production, the lower

Figure 3.1

DIAGRAMMATIC REPRESENTATION OF ECONOMIC RELATIONSHIPS AMONG SELECTED VARIABLES



the price of imports vis-à-vis the price of locally produced goods and, until such time when the economy is no longer subject to balance of payments pressures, the higher the exports receipts during the year. Alternatively, imports may be treated as exogenous, being determined solely by policy; this is particularly true in the case of foreign exchange-constrained economies. This is also true in cases where some imports are planned from loans obtained from development banks and other bilateral sources at the instance of the development authorities.

Determination of real output, general price level and imports allows us to obtain values of other macroeconomic variables, namely, tax revenue, private consumption, and government expenditures. Figure 3.2 depicts the relationships involving these variables.

The amount of tax receipts is shown to depend on real GNP, the general price level, and the value of imports — since a large portion of total tax collections comes from customs duties. Tax revenue, in turn, determines the level of government expenditures on current account and, jointly with real output, also determines private consumption. It should be clear, however, that government current expenditures may be treated as a policy variable for planning purposes.

The economic relationships discussed above have been estimated using official national income accounts data for the period 1950-69. The resulting regression equations are presented in Appendix A. Here, it is necessary to point out that equations (4) and (8) have not been used in generating the projections in this chapter as both imports and government current expenditures during the Plan period are not expected to follow their behavior in the observation period 1950-69.

The interdependence among the macroeconomic variables implies a circumscribed set of feasible magnitudes of the endogenous variables depending on the values of the exogenous variables of the model. Economic policies designed to influence some of these exogenous variables therefore play a significant role in shaping the behavior of the endogenous variables over the Plan period. We may reasonably designate as objective or target variables the following: real GNP, employment, investment, annual price level, and the trade balance.

One implication of the system of economic relationships discussed above is that it is impossible for the government to pursue economic policies that will simultaneously advance the objectives of higher output growth, higher employment, lower price level and improved balance of payments, as represented by the aforementioned target variables. For example, attempts to increase output, investment and employment by increasing the amount of money in circulation could be frustrated by higher prices and a widening trade gap. Likewise, maintaining a high wage policy may only entail lower output and employment. In short, there is considerable scope for policy choice concerning the target variables.

2. FORECAST OF EXOGENOUS VARIABLES

To be able to say anything about the target values of the objective variables, it is necessary to have an idea of how the exogenous variables will change over the Plan period.

Considering first non-policy variables, future changes in import and export prices can only be assumed. A 2 per cent annual rate of increase seems reasonable for the import price index, in anticipation of the rising prices of oil and other industrial imports. It is assumed that the exchange rate will not differ very much from the current level until 1975.

Copper concentrates are expected to command lower world market prices through 1975; this decline, however, will be offset by the slightly rising price trend of other exported commodities. Little change in the export price index is foreseen over the next few years.

The remaining exogenous variables are to some extent policy determined. Their forecast values for the years during the Plan period are obtained on the basis of (1) historical growth, (2) **a priori** expectations, and (3) target values of the objective variables.

Money wage for unskilled industrial workers in CY 1971 is expected to average about ₱2,344 per year, after allowing for adjustments to the 1970 minimum wage legislation. The projected wage increases in subsequent years are made to conform to the historical pattern.

A progressive expansion of money supply is envisaged during the Plan period to meet target requirements. The annual growth rate will accelerate from 8 per cent in CY 1972 to 8.5, 9, and 10 per cent in the next three years.

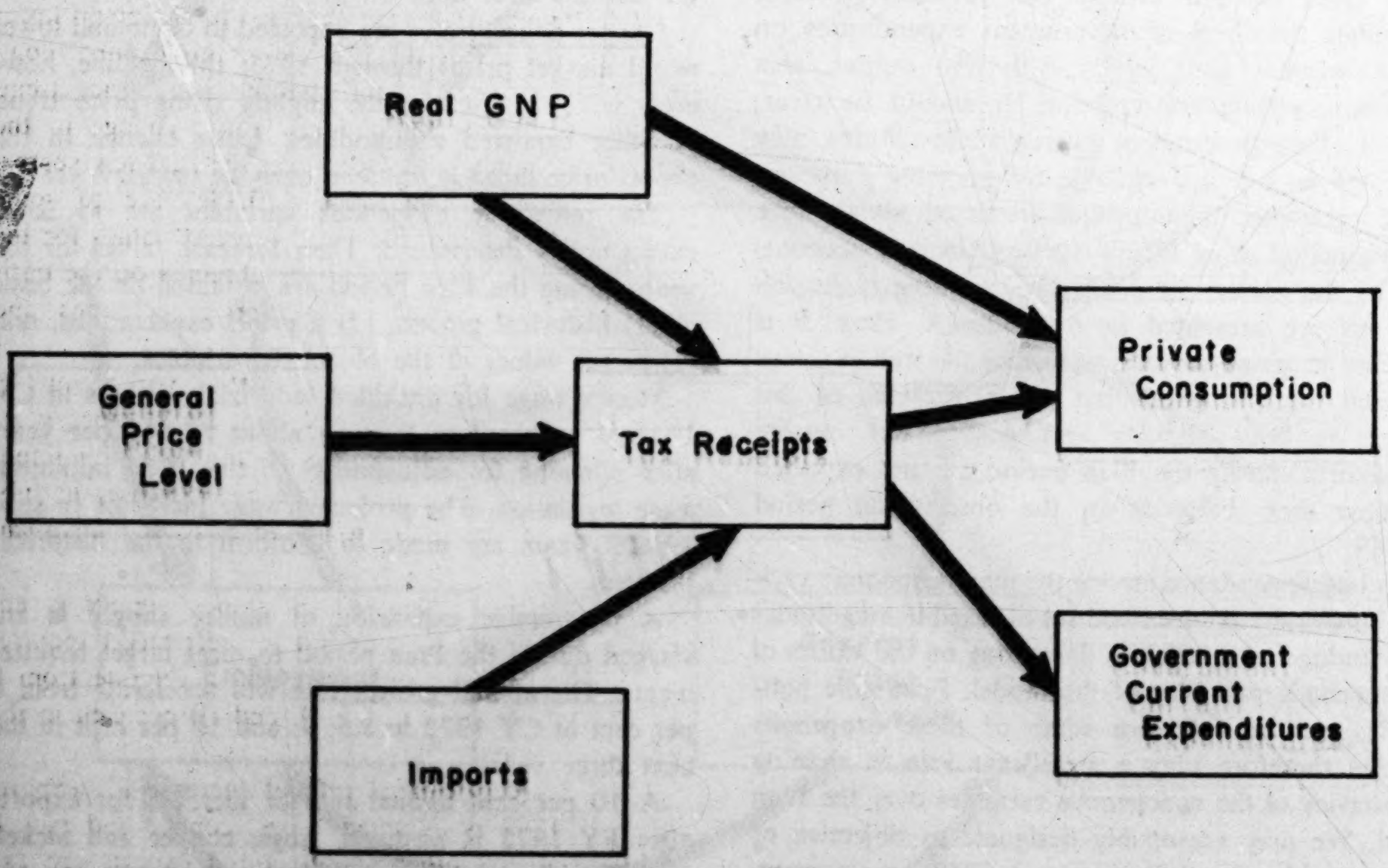
A 10 per cent annual rate of increase for exports after FY 1972 is assumed. Logs, copper and nickel, agrindustrial and other manufactured exports are expected to increase substantially during the Plan period.

Government current expenditures are planned to rise by about 4.5 per cent starting from FY 1972.

Imports will be allowed to increase by 8.5 per cent from FY 1972 to FY 1973 and 9 per cent annually in the remaining years. Such a schedule of importation seems compatible with the projected values of the exogenous variables in meeting target requirements.

Figure 3.2

DIAGRAMMATIC REPRESENTATION OF THE DETERMINATION OF TAX REVENUE, PRIVATE CONSUMPTION AND GOVERNMENT CURRENT EXPENDITURES



The above forecasts imply a set of values of the exogenous variables on a fiscal year basis as listed in Table 3.1 (The data used in estimating the equations shown in Appendix A are calendar year values in 1955 prices. Some coefficients have been adjusted to reconcile the projections to the recent national income estimates derived on a semestral basis. The projections listed in this chapter have been converted to fiscal year values in 1967 prices.)

3. TARGETS OF THE DEVELOPMENT PLAN

As mentioned already, the projected values of some of the exogenous variables have been chosen, using the estimated macromodel, such that the target values of the objective variables during the Plan period are met. Table 3.2 shows the year-by-year values of real GNP, general price index, employment, investment and the trade deficit.

The gross national product target will increase at an average annual rate of 6.9 per cent during the Plan period. A 6.5 per cent rise is envisioned for the first year, followed by a 7.0 per cent growth rate in each of the remaining three years.

4. FORECAST OF OTHER MACROECONOMIC VARIABLES

Table 3.3 gives the initial and forecast values for the years under the Plan period, as well as for FY 1970 and FY 1971, of total tax revenue, private consumption expenditures and disposable income. As indicated earlier, tax receipts depend on gross national product and imports, each expressed in current prices; private consumption expenditures is determined by real disposable income (which is defined here as the difference between GNP and total tax payments), wage rate and general price level. Total consumption expenditures represent the sum of private and government consumption expenditures.

The general price level is not expected to rise annually beyond 5.7, 6.0 and 7.0 per cent for FY 72-73, FY 73-74 and FY 74-75, respectively. Employment and investment will grow at an average annual rate of 5.5 and 8.7 per cent, respectively.

Tax receipts which include both local and national government collections of direct and indirect taxes[1] are seen to increase by about 13.5 per cent annually, private consumption by 6.2 per cent, total consumption by 6.0 per cent and disposable income by 7.0 per cent.

[1] Indirect taxes are as defined in the national income accounts, i.e., it includes, aside from indirect tax collections, surpluses or profits of government corporations.

Table 3.1—INITIAL AND FORECAST VALUES OF EXOGENOUS VARIABLES

	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
Export price index (=100 in 1967)	125.2	148.8	157.3	157.3	157.3	157.3
Import price index (=100 in 1967)	113.7	136.3	145.6	148.5	151.3	154.2
Exports (million pesos, 1967 prices)	4,482	5,921	6,582	7,240	7,964	8,761
Imports (million pesos, 1967 prices)	5,669	6,272	7,293	7,914	8,625	9,399
Annual wage rate (pesos)	2,162	2,344	2,496	2,620	2,758	2,926
Government current expenditures (million pesos, 1967 prices)	3,038	2,835	3,158	3,298	3,446	3,600
Money supply (million pesos)	4,163	4,898	5,443	5,892	6,408	7,018

Table 3.2—INITIAL AND TARGET VALUES OF OBJECTIVE VARIABLES

	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
Gross National Product (million pesos, in 1967 prices)	31,320	33,042	35,190	37,653	40,290	43,110
GNP price deflator (=100 in 1967)	115.2	133.7	141	149	158	169
Employment (thousand workers)	12,056	12,508	13,021	13,594	14,206	14,845
Investment (million pesos, in 1967 prices)	7,041	6,678	7,995	8,680	9,445	10,271
Trade deficit [a] (million pesos, in current prices)	832	−257	265	364	522	712

[a] Using the notations of the macromodel, the trade deficit is equal to $M^* - X^*$ (see p. 3.14).

Table 3.3—INITIAL AND FORECAST VALUES OF OTHER ENDOGENOUS VARIABLES
(In million pesos)

	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
Tax receipts (current prices)	3,777	4,541	5,305	5,981	6,784	7,758
Personal consumption expenditures (1967 prices)	24,007	25,180	25,930	27,546	29,271	31,049
Total consumption expenditures (1967 prices)	27,045	28,015	29,088	30,844	32,717	34,649
Disposable income (1967 prices)	27,543	29,646	31,425	33,636	36,000	38,536

Appendix A

MACROECONOMIC MODEL OF THE PHILIPPINES*

The model consists of 8 structural equations and 3 identities, estimated by ordinary least squares using recently revised official data for 1950-1969:

Structural equations (Numbers underneath regression coefficients represent values of the t-statistic.)

$$(1)\quad Y = \underset{}{-2443.5} + \underset{(4.18)}{.9590\ N} + \underset{(4.39)}{.1994\ K}$$

$$\bar{R}^2 = .991 \quad D.W. = .713$$

$$(2)\quad N = \underset{}{4112.8} + \underset{(16.62)}{.5877\ Y} + \underset{(2.29)}{13.11\ P} - \underset{(-4.46)}{2.561\ W}$$

$$\bar{R}^2 = .990 \quad D.W. = 1.369$$

$$(3)\quad P = \underset{}{85.370} - \underset{(-7.71)}{.0043\ Y} + \underset{(18.22)}{.0423\ Z}$$

$$\bar{R}^2 = .933 \quad D.W. = 1.828$$

$$(4)\quad M = \underset{}{2811.3} + \underset{(2.28)}{.0885\ (Y-X)} + \underset{(2.04)}{.4431\ X} + \underset{(2.87)}{7.2435\ P_x} + \underset{(2.88)}{2074.91\ P\ P_m}$$

$$\bar{R}^2 = .935 \quad D.W. = 1.988$$

$$(5)\quad I = \underset{}{-251.24} + \underset{(9.09)}{.1680\ Y} + \underset{(2.94)}{.3281\ M} + \underset{(2.47)}{8.864\ P} - \underset{(-3.51)}{1.095\ W}$$

$$\bar{R}^2 = .987 \quad D.W. = 2.215$$

$$(6)\quad T^* = \underset{}{-72.627} + \underset{(10.74)}{.0923\ Y^*} + \underset{(2.20)}{.0824\ M^*}$$

$$\bar{R}^2 = .996 \quad D.W. = 1.160$$

$$(7)\quad C_p = \underset{}{1902.8} + \underset{(25.08)}{.8895\ (Y-T)} - \underset{(-5.21)}{27.59\ p} + \underset{(2.31)}{1.087\ W}$$

$$\bar{R}^2 = .996 \quad D.W. = 1.694$$

$$(8)\quad C_g = \underset{}{-80.116} + \underset{(33.45)}{.9391\ T}$$

$$\bar{R}^2 = .983 \quad D.W. = 1.170$$

Identities

$$(9)\quad C = C_p + C_g$$

$$(10)\quad K = K_{-1} + I_{-1}$$

$$(11)\quad A = Y - I - C + M - X$$

Endogenous variables

Y = GNP at 1955 prices; in million pesos

N = average of the May and October employment survey figures, in thousands

P = implicit price index for GNP; P — 100 for 1955

M = imports of goods and services at 1955 prices; in million pesos

I = gross domestic investment at 1955 prices; in million pesos

T = direct and indirect taxes, divided by .01P; in million pesos

C_p = private consumption expenditures at 1955 prices; in million pesos

C_g = government consumption expenditures at 1955 prices; in million pesos

C = total consumption

K = capital stock at 1955 prices at beginning of year; in million pesos ($K_{1950} = 2.58\ Y_{1950}$)

A = net factor income from abroad at 1955 prices; in million pesos

Exogenous variables

W = annual money wage rate, computed as equal to the daily wage rate of unskilled industrial workers in Manila multiplied by 250; in pesos

Z = average of end-of-month money supply (currency plus demand deposits) lagged three months; in million pesos

* Based on the recent work of Dr. J. Encarnacion and associates at the School of Economics of the University of the Philippines, which was supported by a research grant from the National Economic Council.

X = exports of goods and services at 1955 prices; in million pesos

P_x = export price index; P_x — 100 for 1955

P_m = export price index; P_m — 100 for 1955

Notational definitions

$X^* = .01\ P_x\ X$ (the current value of exports)

$M^* = .01\ P_m\ M$

$T^* = .01\ PT$

$Y^* = .01\ PY$

Equation (1) represents an aggregative production relation with capital and labor inputs determining the level of real output. The marginal productivity of labor is ₱59 per year at 1955 prices, which seems reasonable considering that the wage rate in 1969 was ₱1,220 at 1955 values.

Equation (2) may be considered a labor demand function, the level of employment determined not only by real output but also by the money wage rate and the general price level. Other things remaining the same, employment will be reduced by about 256 thousand workers if the annual wage rate is increased by ₱100. But since output decreases with employment by equation (1), the fall in employment will be greater.

The price equation (3) provides a good explanation of the general price level in terms of money supply (lagged three months) and real output. It implies that a ₱1 million increase in the money supply will have no effect on the general price level provided there is a concomitant increase in real output of about ₱9.8 million (= .0423/.0043).

The import equation (4) may be considered at least in part as a decision function on the part of the national authorities, in particular the Central Bank. Imports are determined by real income, current export earnings, and the ratio of the general price level to import prices. The higher is the general price level, the higher is the level of imports because these become relatively cheaper; conversely, higher import prices lead to lower imports. The marginal propensity to import indicated is .10, which seems credible. That **X** and P_x are explanatory variables should not be surprising, since the monetary authorities are likely to be more liberal in permitting imports when foreign exchange earnings are high than when they are low.

Since investment is undertaken for the output it would produce, its profitability depends positively on the price level and negatively on the money wage rate. This is reflected in equation (5), which makes investment a function of **P** and **W**. The volume of imports is another determinant of investment, since machinery and capital equipment are mostly imported. The major determinant is real income, and the estimated marginal propensity to invest is .16.

The tax-yield equation (6) includes imports as an explanatory variable, since a large proportion of indirect taxes is collected through customs. In recent years, the ratio of customs collections on imports to total taxes has averaged about 19 per cent. Current values of the variables are used for obvious reasons.

The consumption function (7) is quite interesting. It gives a marginal propensity to consume of .89, which seems credible, and it takes account of the effects of money wage and price level changes. One may expect that an increase in the money wage increases consumption, considering that wage-earners are supposed to have higher propensities to consume compared to rentiers. Also, a rise in the price level reduces consumption, for, if disposable income and the money wage are held fixed, an increase in prices can only reduce the level of consumption.

The remaining equations appear to require no comment. It may be noted, though, that the variable **A**, net factor income from abroad, is a residual item and plays no real role in the model.

The model is consistent in that there are just enough equations to determine the values of the endogenous variables. There are no two ways of determining real output, unlike "two-gap" models where the difference between domestic investment and saving, **I** — (**Y** — **C**), is in general not equal to the net inflow of foreign capital, **M** — **X** — **A**. In the present model, these two are always equal because of the way **A** is determined. One disadvantage here, of course, is that predictions of **A** are likely to be poor; but this would seem to be a minor disadvantage. The more important point is that the model does not take into account possible constraints on the net inflow of foreign capital: it implicitly assumes that the necessary inflow is always forthcoming.

On the whole, the estimated equations show a high degree of statistical reliability. The coefficient of determination is uniformly high and the t-values imply significance of the parameters at the 5 per cent level. The values of the Durbin-Watson statistic appear to indicate some serial correlation but it must be remembered that this statistic was designed for regression equations where the explanatory variables are all exogenous.

The predictive power of the model has been tested both within and outside the observation period. Given the actual values of the exogenous variables for 1955-1969, the model generates time-paths of the endogenous variables converging to the actual time-paths, which implies that no systematic error is present in the model. The model's "projections" for 1970 also compare favorably with the actual values of the endogenous variables. In particular, the sudden increase in the general price level in 1970 is captured, indicating that the model is capable of foreseeing abrupt changes in the endogenous variables.

Appendix B

CAN WE ACHIEVE OUR TARGETS?

The projections for the Four-Year Plan were made with the help of en empirical macromodel of the Philippine economy. Although the use of this framework ensures internal consistency, it is nevertheless useful to inquire as to what degree of confidence can be placed on the projections as a whole, and a candid view can only benefit the planning process.

The targeted values of the objective variables in the Plan, e.g., gross national product, employment and investment, are based on conservative assumptions about the structural character of the economy and in relation to what the government can undertake through the use of various policy instruments.

The data underlying the model cover the years 1950 to 1969, and the estimated relationships reflect the "average" of the economic structure during this period. The projections assume that the basic economic relationships in the model will remain unchanged for the next four years; thus, any change in the defined structural relationships will result in the non-attainment — under-attainment or over-attainment — of targets.

Possible Changes in Economic Structure

There are two major variables in the model, namely, money supply and exports capable of accelerating growth in real GNP and in employment. Export volume in itself does not appear to be an important stimulant. If export growth were to be 8 per cent per year rather than 10 per cent per year, the expected growth rate of real GNP would decrease by only a tenth of a percentage point and the effect on the growth of employment would be even less (of course, the foreign trade gap would be significantly widened).

The apparent poor response of real GNP and employment to export growth in the model may have been the result of the structural nature of Philippine export products in the past. With the projected shift in the composition of exports from principally agricultural to industrial and other new export products (see Chapter 5, "Foreign Trade"), the effect of exports on the economy will be multiplied by the linkages generated by its more diversified character. Consequently, the growth of exports will have a more substantial impact on the economy, although the model may still not reflect this significantly.

The money supply on the other hand is a rather potent factor. If it were to be increased at 15 per cent per year then real output would be expected to rise by 10 per cent per year, and employment by 9 per cent per year. However, the stimulation to economic activity could bring about rapid inflation: prices in 1975 could be 70 per cent higher than in 1970. Achieving growth this way would be rather costly.

This indicates, quantitatively, the need for reform and improvement in the structure of the economy. In the context of the model, measures need to be found so as to effect changes in the coefficients and/or specifications in the basic macromodel. (These measures have been discussed in Chapter 2, "Agenda for Reforms".)

For instance, the demand for investment goods is a critical relationship. The marginal investment-income ratio for 1950-1969 is estimated to be 0.17. It may be possible to increase this coefficient to say 0.20 by means of a consumption freeze, i.e., restrictions on the availability of consumer goods.

Another important investment-determining variable has been imports. Only one-third of every increment in imports has been transformed into capital formation, in spite of the fact that final consumer goods account for only 15 per cent of imports. This has been the consequence of protectionist policies, producing an import-dependent manufacturing industry. Government control over the import component of domestic manufactures can be expected to improve the imports coefficient in the investment equation.

The industrial structure betrays a strong capital-goods orientation with previous wage increases dampening both employment and capital formation. As estimated from 1950-1969 data, a wage increase of 10 per cent over one year would lead in the same period to a decline in investment by about 7 per cent.[1] There exists a serious conflict between improvements in the welfare of those presently employed and the availability of employment oportunities, especially for those newly entering the labor force. However, measures which promote labor-intensive rather than capital-intensive activities may lead to improvements in the economic structure as regards wage effects during the Plan period.

In the case of production technology, improvement in techniques are of obvious importance, e.g., the boost of rice production beginning in the latter sixties. Such improvements cannot usually be legislated; long-term commitments to basic and applied research are necessary. Legislative and executive action can be taken to remove barriers to the use of existing technology, such as patents, licensing and copy-rights.

Any of these structural shifts — a rise in the marginal investment income ratio, an increase in the investment-import ratio, the employment of relatively more labor-intensive techniques, growth in productivity, improvement of the tax effort — can lead to over-attainment of the targeted variables in the Plan.

However, over-attainment of targets is still possible even without any change in the structure of the economy. This is largely due to the presence of random elements which cannot be predicted (for details, see Technical Notes at the end of the Appendix). Weather is one such factor, and in the case of an open economy like the Philippines, the developments in the world market are also critical.

In addition to these factors, the projection of the values of exogenous variables, such as export and import prices, real export volume, money supply and wage rates, may diverge from the actual. This possibility is more significant in the case of the last three, since these are essentially policy determined. For instance, money supply and/or wages may be allowed to grow more rapidly than assumed, or export promotion policies may enhance export growth faster than specified. Again targets may be over-attained.

For the same reasons (random factors and accuracy of forecasts of exogenous variables), under-attainment is also possible. Unfavorable weather conditions may adversely affect the level of agricultural production and exports. Any drastic fall in world prices for Philippine export products may result in a lower export growth relative to that assumed in the projections.

Conclusion

The projections of the target variables for the Plan period rely mainly on past performance of the economy and for this reason are felt to be basically conservative. For example, it is assumed that no significant changes in the structural character of the economy occurs during the next four years; hence, non-attainment, in fact over-attainment of targets may result from the development of an economic structure over 1971-75 which is significantly different from that of the past twenty years. Certain measures, such as the Investment Incentives Act, the Export Incentives Act and recent Central Bank restrictions indicate the possibility of these structural shifts.

Non-attainment of the projected targets may also be caused by the presence of random elements, but in this instance, under-attainment and over-attainment of projections under the plan must be considered as equally likely. Continuing economic research should, over time, reduce the element of uncertainty.

Finally, the assumptions about the values of the exogenous variables during the plan period, especially those that are policy determined, may differ from the actual. Non-attainment may therefore result, and in this case, over-attainment may be more likely since the assumptions adopted with regard to exogenous variables are conservative.

Technical Notes

The size of forecast error expected from random elements is at least as large as the standard error of estimate of the equation concerned. It ordinarily becomes larger for forecasts farther in the future because projected values of independent variables ordinarily get more and more removed from those experienced in the past.

[1] At 1971 levels of wages, employment and investment. The plan projections assume annual wage-increases by 6 per cent.

The standard error of estimate of the aggregate production function is ₱329 million (in 1955 prices); this is approximately 1.58 per cent of the projected real GNP figure for 1971. Thus random factors alone could "easily" result in 1971 real GNP being 1.5 per cent less than projected; this also implies that the real GNP growth rate may be less than projected, approximately 5.5 per cent per annum instead of 7.0 per cent per annum. In the case of this function the most obvious random element is weather. Good weather and other change factors could on the other hand result in real GNP for 1971 being 1.5 per cent greater than projected, equally "easily". For one to have confidence in the 1972-1975 projections to an equal degree, the allowance to be given would have to be somewhat larger than plus or minus 1.5 per cent.

The standard error of estimate of the price equation is 1.84 index points (1955 = 100); this is about 0.8 per cent of the projected price index level for 1971. While efforts at stabilizing prices are principally part and parcel of development planning, the Plan is confident that price increases will not exceed increments of 5½ per cent in 1972 to 8 per cent by 1975. These are the tolerable limits beyond which the economy is not willing to proceed. An allowance may be made in the expected inflation rate to the extent of plus one percentage point to allow for chance factors.

The standard error of estimate of the employment equation is 168 thousand persons; this is 1.3 per cent of the projected level of employment in 1971. The growth of employment is projected to average about 5.5 per cent per year. The rate of growth in the first year could "easily" range from 4.1 per cent to 7.0 per cent, and somewhat wider ranges would be appropriate for later years.

CHAPTER 4

The Balance of Payments and the External Debt

1. INTRODUCTION

There was a tremendous improvement in the balance of trade in CY 1970, the deficit falling from $257 million in CY 1969 to only $8 million. Exports grew by 24 per cent, and imports fell by 4 per cent. These changes were the immediate consequence of the **de facto** devaluation of the peso in February 1970. The present plan is to maintain a rate of growth of exports rapid enough to bring about a small deficit in the balance of trade and a moderate surplus in the balance of trade after considering invisibles and transfers. The present external debt service problem is not expected to diminish substantially over the Plan period. However, institutional arrangements have been made to improve the management of the debt, and it is expected that debt obligations will remain within present legal limits. Details on projections used are contained in sections following.

2. PROJECTION OF EXPORTS AND IMPORTS

The assumption most basic to projections of the balance of payments over FY 1971/72-FY 1974/75 is that the dollar value of exports will continue to expand at a rapid rate. Exports have been projected to grow at 14 per cent in the first year, and 10 per cent per annum thereafter. The revision from the previous targeted rate of 8.5 per cent per annum appears to be quite feasible.

The mid-August announcement of the suspension of convertibility of the U.S. dollar into gold and the imposition by the U.S. of a 10 per cent surcharge on imports do not diminish the export prospects of the economy. One effect of the U.S. decision has been to decrease the market value of the dollar in terms of the currencies of other nations, the Philippines included. The fall of the peso-dollar inter-bank guiding rate from 6.435 : 1 before the announcement to 6.40 : 1 by mid-September 1971 is an indication of this. The U.S. dollar's value in terms of the European currencies and the recently-floated yen has decreased to a relatively greater extent, however, and thus the peso's value in terms of these currencies has fallen.

Whereas the Philippines' trade balance with the United States is expected to worsen, its balance with Europe and Japan is expected to improve. The effect on Philippine exports of the 10 per cent U.S. surcharge is not expected to be sweeping. Less than one-fifth (in value) of total exports to the U.S. that are dutiable under the Laurel-Langley Agreement will be affected by the surcharge. It is estimated that, if the surcharge is borne wholly by Philippine exporters (and not shared with U.S. importers, which would be more realistic), then the amount of the surcharge would be less than $12 million for a one-year period. All in all, since only one-third of Philippine foreign trade is conducted with the U.S., the net effect is expected to be an improvement in the trade position. It should be noted, however, that foreign trade data measured in a given amount of U.S. dollars will refer to fewer goods traded with non-U.S. partners than before.

Export expansion will contribute to about one-third of the expected growth of imports over the period; it is estimated that every additional million dollars of exports generates about $350,000 worth of imports, other things equal.[1] This relationship reflects the historical importance of export earnings in determining the tightening or easing of import regulations by monetary and other authorities. Additional imports growth will be induced by the growth in GNP (as targeted), the changes in peso prices of imported products relative to domestic products, and the anticipated availability of external capital for special projects.

It appears that the adjustment of peso prices of both domestic and imported products to the February 1970 floating of the peso will continue to 1971. The wholesale price index of domestic products in Manila was already 225 (1955 = 100) in February 1971, compared to 203 in 1970 (average). The wholesale price index of imported products in Manila was already 240 in February 1971, compared to 221 in 1970 (average). The projections of external trade thus anticipate that average domestic product prices will increase by 11 per cent in 1971 over 1970, will decelerate to 5-½ per cent in 1972 over 1971, and then may accelerate gradually,

[1] See Appendix A for the Philippine economy macro-model used as a basis for internal consistency of the Plan.

due to projected acceleration of credit expansion in the latter half of the Plan.

It is also estimated that peso prices of imported products will increase by 13 per cent in 1971 over 1970, but will increase by only 2 per cent per annum thereafter.[2] The large price increases in 1971 are partly due to the increase in prices of petroleum products early in the year, following the recent price hike of Middle East oil. Increases in import prices after 1971 are expected due to appreciation in value of European currencies and, again, oil price increases (the oil producers are protected by an upward-sliding price agreement). Revaluation of the Japanese yen is also a possibility not to be overlooked.

The projections do not include a trend factor for export prices; if they should increase, then the task of meeting targets will be eased to some extent.[3] The peso : dollar rate, which rose from 5.83 : 1 in 1970 (average) to 6.40 : 1 currently, is assumed to hold at 6.5 : 1 during the Plan period.

Data for the first four months of 1971 indicate that the dollar value of both exports and imports may rise by 14 per cent above the respective levels in 1970. In the case of imports, however, this would represent only 4½ per cent per annum from 1969; in comparison, the 1962-1969 rate of growth was about 8.8 per cent per annum. After 1971 it is expected that more than two-thirds of the growth in imports will be determined by the growth of exports and of GNP. A part of the remainder of the growth will be due to a somewhat more rapid increase of domestic product prices compared to import prices; this will be an unavoidable consequence of planned credit expansion. The target growth rates of exports, GNP and the money supply are expected by themselves to induce annual increases in the dollar value of imports by about 8½ per in 1972, 9 per cent in 1973, 9½ per cent in 1974 and 10 per cent in 1975.

Finally, it is anticipated that a minimum amount of external capital will be available at concessional terms to finance additional imports of investment goods over the Plan period. These expectations stem from the recent meeting of the Consultative Group of countries interested in expanding assistance to the Philippines under the sponsorship of the World Bank. Additional imports are thus planned as folows: $40 million in FY 1972/73, $60 million in FY 1973/74, and $100 million in FY 1974/75. These are expected to be channeled entirely into domestic capital formation, and would be of the nature of growth-inducing imports. In contrast, a large part of past imports has been growth-induced, e.g., imports of raw and semi-processed materials for manufacturing.

[2] The historical price trend for imports is about 1 per cent per annum.

[3] The historical price trend for exports is about ½ per cent per annum.

3. INVISIBLES AND TRANSFERS

Invisible receipts and payments (excluding interest) consist mainly of freight, insurance, and travel, and are projected at the same rates as exports and imports, respectively. The growth of transfer receipts is expected to be roughly linear, except for 1971, when a substantial increase is expected in Japanese reparations. The bulk of the receipts are pensions from the U.S. government and can be fairly well anticipated. Transfer payments from other government sources are judged to remain constant over the Plan period.

The reduction in U.S. foreign aid by 10 per cent, as contained in the recent dollar policy announcement, has introduced a problem of uncertain scope. U.S. contributions to multilateral institutions are expected to be reduced; these may be offset to some extent by increases in contributions of non-U.S. donors. The bilateral program through U.S. AID is of more immediate concern. The Philippine government is exerting efforts not to have previously pledged aid diminish.

4. PROJECTED BALANCE OF PAYMENTS

A projection of the balance of payments over the next four fiscal years is given in Table 4.1. The trade deficit is expected to grow from $10 to $55 million over the Plan period. Net invisibles will remain negative and grow from −$35 to −$55 million, chiefly because transport receipts will continue to bear a very small proportion of transport payments.

The balance of trade, invisibles and transfers is expected to decline from +$101 million to +$50 million over the period. The bulk of this will be required to finance the targeted increase in international reserves of $45 million per year. A relatively small amount will be available to finance the external debt. Management of the debt will stand out as the main balance of payments problem to be tackled over the Plan period.

The External Debt

As Table 4.1 shows, Philippine foreign exchange receipts, including transfer payments, are expected to be more than sufficient to cover current foreign exchange payments. The external debt problem is the result partly of the historical pattern of external debt

obtained during the 1960's. With the peso freely floating, a shortage of refinancing capital would be expected to be quickly reflected in the foreign exchange rate. The new four-year Plan considers, however, that adequate refinancing can be obtained.

The external debt was the most prominent among problems discussed at a meeting in April 1971 of countries (the Consultative Group) interested in extending assistance to the Philippines over the next several years. It was attended by Australia, Japan, Spain and the United States as active members and Switzerland, Canada, Germany, India, Netherlands, New Zealand, and United Kingdom as observers. The World Bank, Asian Development Bank and the United Nations Development Program also participated in the meeting. Several of the participants indicated what loan commitments could be expected from their countries or institutions.

The external debt outstanding at the end of CY 1970 amounted to $1,964.6 million. Of this amount, 17 per cent represented short-term debt, 28 per cent medium-term debt and 55 per cent long-term debt. Restructuring of the debt during 1970 produced a considerable improvement from the term distribution a year earlier, viz., 27 per cent short-term, 32 per cent medium-term and 41 per cent long-term.[4]

The public sector has made some improvement in its ability to obtain external financing. As of the end of CY 1968, Philippine external **public** debt per capita was $12, far smaller than the per capita external public debt of Taiwan ($48), South Korea ($32), Singapore ($21), or Mexico ($51),[5] all rapidly developing countries. At the end of CY 1970, the public sector (general government, the Central Bank, and other government banking institutions) bore 42 per cent of external debt outstanding; this amounted to $827.0 million, or $22 per capita.

5. CENTRAL BANK SUPERVISION

The Central Bank has furnished data on debt service requirements on the external debt balance as of December 31, 1970. It will be necessary to incur new debt in order to finance this debt service, as well as the desired increments in the international reserve. The Monetary Board is currently requiring that new foreign borrowing and/or restructuring of outstanding obligations should have no payment of either principal or interest falling due earlier than July 1, 1973. This will tend to limit external capital requirements during the first two years of the Plan.[6]

An important restriction has also been applied by R.A. 6142, which provides for a debt service ceiling at 20 per cent of the average of gross foreign exchange receipts over the previous three years. The Central Bank has organized a new division, the External Debt Management Office, which is now in charge of monitoring external debt and taking note of future service requirements.

It needs to be stressed that the great majority of the outstanding debt has been on **private** account. The private debt pattern has been due partly to the propensity of foreign commercial financing institutions to extend export credits. Provided that these loans have been channeled into economically viable projects, the capacity, in real terms, of the private sector to service its debt is more or less assured. Nevertheless, careful coordination is required such that serious imbalances do not occur between the supply of foreign exchange and the competing demands made on it for imports and the debt service. The assignment of this task to the External Debt Management Office recognizes the need for an "early warning system" to forestall disruptive foreign exchange and external debt crises.

6. PROJECTION OF THE EXTERNAL DEBT

The external debt outstanding at the end of CY 1970 was $1,964.6 million. Payments due during the first semester 1971 are $62.7 million in interest and $230.0 million in amortizations. The balance of trade, invisibles, and transfers for first semester 1971 is projected at + $58 million. Data up to the end of April 1971 indicate that the international reserve is likely to remain at its December 1970 level up to the end of the first semester of 1971. Hence, required new borrowing during first semester 1971 will be 62.7 + 230.0 — 50.8 = 234.7 million dollars. Estimated debt outstanding at the beginning of the new four-year plan is 1,964.6 + 234.7 — 230.0 = 1,969.3 million dollars.

The service during the Plan period on new debts incurred during the first semester 1971 and FY 1971/72-FY 1973/74 was projected on the following assumptions:

[4] As originally contracted: if payable within one year, then classified as short-term; if from one to five years, then as medium-term; if over five years, then as long-term.

[5] Excludes undisbursed commitments in all cases; data from *World Bank Annual Report* 1970 and *World Bank Atlas*, 1970.

[6] However, the Central Bank would not be able to exercise control over those loans committed previously but as yet unavailed of. It is assumed that three-fourths of new availments from private sources will be subject to the July 1973 rule.

	DISTRIBUTION OF NEW CREDIT	GRACE PERIOD (YEARS)	REPAYMENT PERIOD AFTER GRACE (YEARS)	ANNUAL INTEREST RATE
Private Sources	70.0%	Up to July 1973*	9	7%
International organizations	13.5%	4	15	7%
Bilateral sources	16.5%	4	20	4%

* Except for one-fourth of availments from private sources, without grace period, assumed governed by earlier commitments.

The terms just indicated are about the softest which may be expected. Hence the projections of gross capital requirements made for FY 1973 74 and FY 1974/75 make use of minimum foreseeable debt service. As indicated earlier, almost all of the servicing requirements for FY 1971/72 and FY 1972 73 are firmly established, the debts already having been incurred.

As Table 4.1 indicates, it is anticipated that external capital will be required to the extent of $344 million in the first year and $315 million in the second year of the Plan. Almost the whole of these amounts will be for servicing of debts. Efforts are being made to secure as large a portion as possible of new commitments in the form of quick-disbursing commodity loans. The new borrowings will require little servicing in the first two years, but will rise to $112 million in the third year and $152 million in the fourth year of the Plan, bringing total servicing to about $386 million in FY 1973 74, and $408 million in FY 1974/75. The estimated total external capital requirement in the third and fourth years of the Plan amount to $358 million and $403 million, respectively.

As indicated in the last row of Table 4.1, the projected net transfer of external resources over the coming four years is negative, but falling from -- $56 million initially to -- $5 million at the end of the period. These projections have already considered the anticipated external concessionary loans previously mentioned. This compares with an average net transfer of $105.7 million for 1965-1968 for external public debt alone.[7]

The total amount of new borrowings programmed each year is the minimum needed to augment foreign exchange receipts so that the debt service, as well as import demand for goods and services, can be met. Net outward transfers imply that the economy shall be meeting its current development requirements solely from its own real resources, and in addition shall be making net repayments for external resources obtained in the past.

Projections of external debt outstanding, new borrowings and debt service over the Plan period are contained in Table 4.2. It is expected that the debt service as a proportion of total export receipts will decline substantially, from 30.9 per cent in the first year of the Plan to 23.7 per cent in the fourth year. The projected ratios of debt service to average foreign exchange receipts of the immediately preceding three years are indicated in Table 4.3. The ratios range from 17.1 per cent to 18.8 per cent, which are within the 20 per cent legal limit set by R.A. 6142.

7. INVESTMENT-DIRECTED IMPORTS

Analysis of the economy over the past twenty years indicates that imports have been highly correlated to the rate of investment and, hence, also to the rate of growth of GNP. This is a pattern which has been observed in rapidly developing countries. Provided that the export sector continues to be dynamic, with rapid growth in total volume and continuous improvement in composition, rapid growth in investment-oriented imports is quite desirable, even to the extent of maintaining a substantial merchandise trade deficit.

The above import projections stem from the relationship imports have borne in the past to other economic factors. The projected imports, and the small trade deficits implied, are consistent with the target rates of growth for the Plan period. But, obviously, there is no plan to limit the growth of the economy to the target rates of less than 7 per cent per annum. Serious efforts are hence being made to obtain external assistance in order to expand growth-inducing imports to the fullest. External commitments to date have been accounted for in the import projections. Additional commitments on suitable terms are being sought, with the view that the economy should be able to absorb up to $500 million of gross capital inflow (compared to the projected $403 million) by FY 1974 75. This implies a desired net transfer of external resources of about $100 million (compared to the projected net outflow of $5 million) by FY 1974 75.

[7] *World Bank Annual Report* 1970, p. 76.

Table 4.1—PROJECTED BALANCE OF PAYMENTS SUMMARY AND EXTERNAL CAPITAL REQUIREMENTS FY 1971/72—FY 1974/75
(In million U.S. dollars)

	FY 71/72	FY 72/73	FY 73/74	FY 74/75
Exports f.o.b.	1,295	1,425	1,565	1,725
Imports f.o.b.	1,305	1,445	1,605	1,780
Trade Balance	−10	−20	−40	−55
Net Invisibles[1]	−35	−38	−45	−55
Net Transfer Payments	146	154	158	160
Balance of Trade, Invisibles and Transfers	+101	+96	+73	+50
Reserve Increase	45	45	45	45
Service on Debt as of end 1970	392	348	274	256
Interest	101	84	65	48
Amortization	291	264	209	208
Initial Capital Requirements[2]	336	297	246	251
Service on New Debt	8	18	112	152
Interest	3	7	42	55
Amortization	5	11	70	97
Gross Capital Requirements[3]	344	315	358	403
Net Inflow[4]	48	40	79	98
Net Transfer of External Resources[5]	−56	−51	−28	−5

[1] Excluding interest payments.
[2] Service on end-1970 debt + reserve increase − balance of trade invisibles and transfers.
[3] Initial capital requirements + service on new debt.
[4] Gross capital requirements − total amortizations.
[5] Net inflow − total interest payments = reserve increase − balance of trade, invisibles and transfers.

Note: These are estimates of capital requirements consistent with the growth of targets of the Plan. See text regarding desirabiliy of maximum expansion of growth-inducing imports. The source of data service on old debt is Table 4.6. Projections in calendar year terms are given in Tables 4.7 to 4.9.

Table 4.2—PROJECTION OF EXTERNAL DEBT OUTSTANDING
BY 1971/72—FY 1974/75
(In million U.S. dollars)

	FIRST SEM. 1971	FY 71/72	FY 72 73	FY 73 74	FY 74/75
Debt outstanding at end of period	1,969	2,017	2,057	2,136	2,234
New Borrowing		344	315	358	403
Amortization		296	275	279	305
Interest		104	91	107	103
Total Debt Service		400	366	386	408
Debt Service/Export f.o.b.		30.9%	25.7%	24.7%	23.7%
Debt Service/Average Foreign Exchange Receipts over Previous Three Years		18.8%	17.1%	17.4%	17.6%

Source of data: Tables 4.1 and 4.3.

Table 4.3—PROJECTED FOREIGN EXCHANGE RECEIPTS AND DEBT SERVICE RATIO
FY 1971/72—FY 1974/75
(In million U.S. dollars)

FISCAL YEAR	FOREIGN EXCHANGE RECEIPTS	AVERAGE RECEIPTS OVER PREVIOUS THREE YEARS	DEBT SERVICE	DEBT SERVICE RATIO*
1968/69	2,113[1]			
1969/70	2,084[1]			
1970/71	2,180[2]			
1971/72	2,169[3]	2,126	400	18.8%
1972/73	2,297[3]	2,144	366	17.1%
1973/74	2,506[3]	2,215	386	17.4%
1974/75	2,740[3]	2,324	408	17.6%

* R.A. 6142 requires that the ratio of debt service to average foreign exchange receipts over the three previous years should be not more than 20 per cent.

Note: [1]actual, [2]estimate, [3]projected. Source of actual and estimated data: Central Bank of the Philippines.

Table 4.4—PROJECTED NEW DEBT SERVICE, FY 1971/72—FY 1974/75
(In million U.S. dollars)

DEBT INCURRED DURING FIRST SEMESTER 1971	INTEREST	AMORTIZATION
FY 71/72	2.9	4.6
FY 72/73	2.6	4.6
FY 73/74	10.8	18.3
FY 74/75	9.6	18.3
Debt Incurred During FY 1971/72		
FY 72/73	4.2	6.7
FY 73/74	16.3	26.8
FY 74/75	14.5	26.8
Debt Incurred During FY 1972/73		
FY 73/74	15.4	24.5
FY 74/75	13.7	24.5
Debt Incurred During FY 1973/74		
FY 74/75	17.5	27.8

Note: Includes debt service on loans from private sources only, since loans from international organizations and bilateral sources are projected with four-year grace periods.

Table 4.5—PROJECTED DISTRIBUTION OF NEW DEBT BY SOURCE
FIRST SEMESTER 1971 AND FY 1971/72—FY 1974/75
(In million U.S. dollars)

PERIOD INCURRED	PRIVATE SOURCES	INTERNATIONAL ORGANIZATIONS	BILATERAL SOURCES	TOTAL
First Semester 1971	164	32	39	235
FY 1971/72	241	46	57	344
FY 1972/73	221	42	52	315
FY 1973/74	251	48	59	358
FY 1974/75	282	54	67	403

Table 4.6—PHILIPPINE EXTERNAL DEBT
MATURITY AND AMORTIZATION SCHEDULE
AS OF DECEMBER 31, 1970
(In million U.S. dollars)

ITEM	AMOUNT OUTSTANDING	1ST SEM. 1971	FY 1971-72	FY 1972-73	FY 1973-74	FY 1974-75
PRINCIPAL	1,964.6	230.0	290.5	264.9	208.7	208.1
A. Revolving Short-Term Credits	248.3	—	—	—	—	—
1. Private Non-Bank	193.5	—	—	—	—	—
2. Private Comm'l Banks	19.5	—	—	—	—	—
3. Gov't Comm'l Bank	35.3	—	—	—	—	—
B. Other Short-Term Credits	80.6	75.1	5.5	—	—	—
1. Private	17.8	16.7	1.1	—	—	—
2. Central Bank	62.8	58.4	4.4	—	—	—
C. Medium-Term Loans	553.1	105.9	167.6	140.0	72.0	50.8
1. Private	316.3	66.9	85.4	73.8	54.7	29.3
2. Government	172.8	18.7	57.8	52.5	13.6	19.6
3. Central Bank	64.0	20.3	24.4	13.7	3.7	1.9
D. Long-Term Loans	1,082.6	49.0	117.4	124.9	136.7	157.3
1. Private	590.5	39.7	74.5	76.0	79.6	69.9
2. Government	291.4	9.3	22.9	23.9	22.1	22.4
3. Central Bank	200.7	—	20.0	25.0	35.0	65.0
INTEREST		62.7	101.3	83.5	64.8	48.4
A. Revolving Short-Term Credits		3.1	0.7	—	—	—
B. Other Short-Term Credits		3.9	0.5	—	—	—
C. Medium-Term Loans		15.9	25.4	17.4	8.5	4.0
D. Long-Term Loans		39.8	74.7	66.1	56.3	44.4
TOTAL FALLING DUE		292.7	391.8	348.4	273.5	256.5

Source: Central Bank of the Philippines.

Table 4.7—PROJECTED BALANCE OF TRADE, CY 1971-75
(In million U.S. dollars at current prices)

	ACTUAL CY 1970	PROJECTED 1971	1972	1973	1974	1975
Merchandise						
Exports, f.o.b.	1082	1230	1360	1490	1640	1810
Merchandise						
Imports, f.o.b.	1090	1240	1370	1520	1690	1870
Trade Balance	—8	—10	—10	—30	—50	—60
Invisible Receipts [a]	258	290	320	355	390	430
Invisible Payments [a]	284	325	355	395	440	490
Net Transfers	123	140	153	156	159	162
Balance of Trade, Invisibles and Transfers	+89	+115	+108	+86	+59	+42

[a] Including investment account except for interest payments.

Source of 1970 data: Central Bank of the Philippines.

Table 4.8—INVISIBLES IN THE BALANCE OF PAYMENTS, CY 1970
(In million U.S. dollars)

	RECEIPTS	PAYMENT	NET RECEIPTS
Transportation and Insurance	37.37	128.61	—91.24
Travel	94.73	27.25	67.48
Investment income*	10.42	24.55*	—14.13
Government n.i.e.	67.50	15.57	51.93
Other services	48.07	88.03	—39.96
Total	258.09	284.01	—25.92

* Excluding interest payments.

Source: Central Bank of the Philippines.

Table 4.9—PROJECTION OF TRANSFERS, CY 1971-75
(In million U.S. dollars)

	1970 ACTUAL	PROJECTED 1971	1972	1973	1974	1975
Total Receipts	127.73	145	158	161	164	167
Pensions from U.S. government	63.75	70	72	74	76	78
Private transfers	33.03	34	35	36	37	38
Japanese reparations	15.00	25	35	35	35	35
Other government n.i.e.	15.95	16	16	16	16	16
Total Payments	4.51	5	5	5	5	5
Net Receipts	123.22	140	153	156	159	162

Source of 1970 data: Central Bank of the Philippines.

CHAPTER 5
Foreign Trade

1. EXPORTS

Exports after 1966 stagnated at slightly above the U.S. $800 million level, declining by 2 per cent in 1967 and increasing by only 4.4 per cent and 0.7 per cent in 1968 and 1969, respectively. However, there was a considerable improvement in the performance of the export sector in 1970. For the first time in Philippine history, exports surpassed the U.S. $1 billion mark, increasing by 24.2 per cent from a level of $854.6 million in 1969 to $1,061.7 million in 1970 (excluding non-monetary gold).

This improvement can be acounted for by the expansion in the domestic production of sugar, copper concentrates and coconut oil brought about by the entry of new producers and the expansion in the productive capacity of the operating ones, and by t he existence in 1970 of favorable world prices for a majority of the principal export products.

More significant, however, is the role played by the set of policies which have created a net incentive farther away from unattractive import substituting activities to relatively better prospects of exports not only in the traditional areas but also in the other sectors of the economy. The most important of these policies is the adoption of the floating exchange rate system which improved the profitability of exporting activities via the higher peso price of foreign exchange. Other important policies are: the approval of the Exports Incentives Act, the support which has been provided by the Export Priorities Plan, and the coordinated approach of the monetary authorities with regard to foreign exchange allocations to export-oriented industries.

The strategy for expanding exports is being reinforced by other measures such as the elimination of red tape in the processing of applications for tax exemptions and incentives and of export procedures for all exporters, the maximum utilization of technical assistance in export promotion efforts, and the proposal for the enactment of an Export Credit Insurance Law. This last measure will provide the necessary capital to exporters so that there will be no disruption of their production and marketing operations while proceeds of their export shipments are being awaited from foreign importers.

In addition to these, the Foreign Trade Zone must be noted as one important project that can enhance export growth once it becomes fully operational. Some of the benefits extended to companies in the zone are duty-free and tax-free importation of raw materials, capital equipment and machineries, including parts; priority in the allocation by the Central Bank of dollars required for importation of materials; and free rental on leased industrial lots up to December 31, 1973, beyond which cheap rental on leased lots will be charged. Among the industries admissible for registration as zone export enterprises are electronic and electrical products, garments, leather products, plastic and rubber products, and pharmaceuticals.

A. Export Projections, 1972-75

The application of policies that are favorable to exports is expected to continue; hence the projections of exports are based on an optimistic assessment of the capabilities of the different sectors that have traditionally earned foreign exchange and of new sectors that are being encouraged to venture into the world market.

Total foreign exchange earnings from exports are estimated to increase at a rate of 10 per cent per year from 1971 up to 1975. Traditional exports will continue to contribute greater absolute foreign exchange earnings for the country. Despite the typhoon damage of 1970, coconut products are projected to account for a larger share of total foreign exchange earnings from exports. This is a consequence partly of prices becoming more favorable and partly of better product response to relative price attractiveness in the agricultural sector.

Mineral exports, comprising both mineral ore and processed mineral exports, are also projected to experience rapid growth. Mineral ore exports are projected to increase by 13.8 per cent per year and exports of processed minerals, by 17.2 per cent per year. Leading the growth of both sub-groups are chromite ore and copper concentrate exports which are expected to expand by 15 per cent per year.

Exports of sugar will grow moderately at an annual rate of 8 per cent. Certainly, the bill under consideration in the United States proposing the reduction of the Philippine share of sugar deficits in the United States from 47.2 per cent to 39.2 per cent can, if enacted, adversely affect this projection. This would reduce the Philippine allotment by 190,000 STRV [1], valued approximately at $30 million. In the case of logs and lumber, only a 2 per cent annual rate of growth is forecasted. This is in line with the objective of eventually rationalizing the development of the wood industry which will not only conserve an important natural resource but also increase employment and income in view of the greater processing to be undertaken. The forecast of exports by commodity group is presented in Table 5.1.

Much descriptive material might be necessary to explain the prospects and assumptions behind some of the export projections by commodities. For instance, in the plan that was superseded by the present one, some discussions on sugar, coconut oil and other traditional exports were incorporated in the section under exports. What must be kept in mind, however, is that quota restricted items in the United States face a rather problematic future as to the nature and character of exportations to that market after the termination of the present trade relations between the Philippines and the United States as provided for in the Laurel-Langley Agreement.

B. Non-Traditional Exports

There will be a large increase in the management of more export lines, thus leading to a diversification not only of the export sector but also of the economy. Consequently, there will be a greater tendency for the share of non-traditional export products to grow.

The percentage distribution of exports by commodity group is shown in Table 5.2. This is presented graphically in Figure 5.1. A significant difference between the general classification here and those utilized in the past is to be noted. Previously, distinction was made between principal exports and other export products. Exports are not classified according to whether they are agricultural or industrial, despite the fact that some traditional exports are industrial in character, e.g., sugar and coconut oil.

From the viewpoint of policy formulation and planning, the latter classification is more important than the former. Thus, the breakdown presented here makes the differences clear among purely agricultural exports (including logs and lumber), mineral ore products, and industrial exports which consist of processed mineral, manufactured and agrindustrial, exports.

The share of agricultural exports, including logs and lumber, is projected to decline from 31.7 per cent in 1970 to 22.2 per cent in 1975. Industrial exports are expected to account for a larger percentage share in total exports in 1975, increasing from 59.4 per cent in 1970 to 62.4 per cent in 1975. The gains here are largely due to the growth of processed mineral exports and manufactured export products. The share of the former in total exports will increase from 20 per cent in 1970 to 27.3 per cent in 1975, while the share of the latter, from 3.2 per cent to 5.2 per cent.

Agrindustrial exports, most of which are traditional foreign exchange earners, will account for a smaller percentage share in 1975, their relative share declining from 36.3 per cent in 1970 to 30 per cent in 1975. Mineral ore exports constituted one per cent of total exports in 1970, and this is expected to remain roughly constant during the Plan period. The share of "other export products" (including nickel in 1974 and 1975) will increase from 7.7 per cent in 1970 to 14.1 per cent in 1975.

C. Exports and the Export Priorities Plan

It must be noted that though the exports of industries that are registered under the export priorities program are still insignificant, they begin to show good export prospects.

For 1970, 37 BOI-registered firms with exportable products contributed $17.8 million of total foreign exchange earnings after their registration with the Board. Of this amount, 15 per cent was generated from export sales made during the first quarter; 21 per cent from the second; 27 per cent from the third; and 37 per cent from fourth quarter sales. Comparing the four quarterly sales, it is interesting to note that there was a progressive trend in the value of exports that were generated for each succeeding quarter. For example, the second quarter sales increased by 38 per cent over that of the first; the third quarter almost by 32 per cent over that of the second; and the fourth quarter by 36 per cent over that of the third quarter.

This rise in export sales was due to (1) the increase in the number of registered products that were sold abroad such as synthetic ropes, synthetic wigs, chemicals, paints and lacquer, crumb rubber, shellcraft products and pencils, and (2) the successful entry of more registered firms into the export market. Table

[1] Short ton raw value equivalent to 2,000 pounds of sugar, polarization 96 degrees.

Table 5.1—EXPORTS BY COMMODITY GROUP, CY 1970-75
(f.o.b. value in million U.S. dollars)

	ACTUAL 1970	ESTIMATED 1971	PROJECTIONS 1972	1973	1974	1975	AVERAGE ANNUAL GROWTH RATE CY 1972-75 (%)
TOTAL EXPORTS	1,082.1	1,230.0	1,360.0	1,490.0	1,640.0	1,810.0	10.0
1. Agriculture	93.7	98.4	103.3	108.5	116.7	125.5	6.3
Copra	80.1	84.1	88.3	92.7	100.1	108.1	6.5
Tobacco	13.6	14.3	15.0	15.8	16.6	17.4	5.0
2. Logs and Lumber	249.8	254.8	259.9	265.1	270.4	275.8	2.0
3. Mineral ores	12.0	13.6	15.5	17.6	20.0	22.8	13.8
Iron ore	3.2	3.5	3.9	4.3	4.7	5.2	10.4
Chromite ore	8.8	10.1	11.6	13.3	15.3	17.6	15.0
4. Processed Minerals ..	216.1	256.7	300.7	352.4	412.2	483.5	17.2
Copper concentrates ..	185.2	222.2	262.2	309.3	364.0	429.5	18.0
Iron concentrates	10.5	12.1	13.9	16.0	18.4	21.2	15.0
Non-monetary gold	20.4	22.4	24.6	27.1	29.8	32.8	10.0
5. Agrindustrial Exports	392.4	434.1	473.1	515.9	562.8	614.1	9.0
Sugar	187.7	206.5	223.0	240.8	260.1	280.9	8.0
Abaca	15.3	15.8	16.3	16.8	17.3	17.8	3.0
Coconut oil	95.6	109.9	123.1	137.9	154.4	172.9	12.0
Desiccated coconut ...	19.4	21.3	23.4	25.7	28.3	31.1	10.0
Pineapple canned	21.4	22.5	23.6	24.8	26.0	27.3	5.0
Copra meal or cake ..	13.9	15.3	16.8	18.5	20.4	22.4	10.0
Plywood	19.7	21.6	23.8	26.2	28.8	31.7	10.0
Sugar confectionary ..	8.4	9.1	9.8	10.6	11.4	12.3	8.0
Veneer core sheets ..	6.8	7.5	8.2	9.0	9.9	10.9	10.0
Plywood panels	4.2	4.6	5.1	5.6	6.2	6.8	10.0
6. Manufactured articles	34.2	42.0	54.0	60.0	76.0	95.1	23.0
Base metals	13.2	15.2	17.5	20.1	23.1	26.6	15.0
Gas, oil, bunder fuel ..	6.8	7.9	10.0	10.3	12.7	14.2	16.2
Fuel, oils, n.e.s.	4.3	5.0	6.6	7.0	8.4	9.5	17.8
Med. & pharmaceuticals	1.4	2.6	5.8	6.4	10.1	12.1	27.8
Wood manufactures	3.5	4.6	5.0	6.1	7.4	10.5	23.5
Portland cement	2.2	3.4	4.7	5.2	9.0	15.9	49.7
Chemical elements ...	2.8	3.3	4.4	4.9	5.3	6.3	18.0
7. Other Export Products [1]	83.9	130.4	153.5	170.5	181.9	193.2	10.4

[1] Composite group of other export products under all classifications. This is predominantly made up of industrial export products such as nickel concentrates

Table 5.2—PER CENT DISTRIBUTION OF EXPORTS BY COMMODITY GROUP, CY 1970-75

	ACTUAL 1970	ESTIMATED 1971	1972	PROJECTIONS 1973	1974	1975
Agricultural Exports	31.7	28.7	26.7	25.1	23.6	22.2
Mineral Ore	1.1	1.1	1.1	1.2	1.2	1.3
Industrial Exports	59.5	59.6	60.9	61.3	62.0	62.4
Agrindustrial	36.3	35.3	34.8	33.6	32.3	30.0
Processed minerals	20.0	20.9	22.1	23.7	25.1	27.2
Manufactured	3.2	3.4	4.0	4.0	4.6	5.2
Other Export Products	7.7	10.6	11.3	12.4	13.2	14.1
	100.0	100.0	100.0	100.0	100.0	100.0

5.3 shows the tabulated export performance of BOI-registered firms for the period January 1-December 31, 1970 (see also Figure 5.2).

In the first semester of 1971, the BOI reported that 50 exporters registered with the Board earned a total of $13 million. This is divided into $5 million in the first quarter and $8 million in the second quarter. For the same period last year, BOI-registered firms earned only $6.4 million divided into $2.7 million in the first quarter and $3.7 in the second quarter. This represents a more than 100 per cent increase over the export earnings of BOI-registered firms for the second quarter and first semester of 1970. For first quarter exports, the increase is almost 100 per cent.

During the Plan period, exports of BOI-registered firms are expected to increase rapidly. This is reflected in the projected 25 per cent average annual rate of growth of "other export products" in the projections of exports by commodity group.

D. Export Promotion

One item that has to be carefully examined in relation to the program of export promotion is the geographic composition of exports. The markets that ought to be developed by the industries that are beginning to export need not be limited to specific regions. In fact the large American market continues to beckon as a major source of exports for labor-intensive products. The exports of some Asian neighbors have reaped enormous growth, by continuing penetration of the U.S. market. As the above remarks imply, this need not be directly related to the provisions of the Laurel-Langley Agreement, although favorable provisions affecting Philippine exports to the United States could be of much help.

The area of promoting industrial exports to the United States depends partly on policies affecting investments of foreign companies in the Philippines. The liberalization of some export lines in the investment priorities schedule will certainly help to some extent in attracting foreign investments in some areas which can eventually be used by the industrial investments authorities as a means of extracting from these investors a degree of export orientation from their activities.

Furthermore, the export promotion program should consider the strengthening of regional or bilateral balancing of trade with a number of countries. Of course, bilateral balancing of trade in the sense of strictly equalizing imports and exports with another country is not a very attractive policy. To some extent, such bilateral balancing will make it difficult for countries to adjust with respect to the exact nature of world trade which is in a sense something that balances itself on a multilateral basis. However some of imbalance against the Philippines can also be reduced by financing arrangements instead.

But it is interesting to point out that a certain degree of bilateral balancing of trade with many countries may lead to a greater expansion of Philippine exports. For instance, in 1970, the Philippines exported $3.5 million worth of products to the North American Countries (excluding the United States) and imported $29.5 million. Taking exports as the base, the importations from these countries were 842.9 per cent of the exports or 8.4 times the exports to Canada. With respect to trade with South American Countries, Philippine exports stood at $1.8 million while imports, at $4.3 million; thus Latin-American exports were 2.4 times greater than Philippine exports in 1970 (Table 5.4).

These discrepancies in trade patterns can be observed also in the case of some countries in Northwestern Europe. For instance, the values of exports to and imports from the United Kingdom in 1970 are $10.7 million and $46.8 million, respectively. Thus, the U.K. exported more than four times what it bought from the Philippines. In the case of Germany, France and other northwestern countries, the same order of

Figure 5.1

PERCENTAGE DISTRIBUTION OF EXPORTS BY COMMODITY GROUP
CY 1970-75

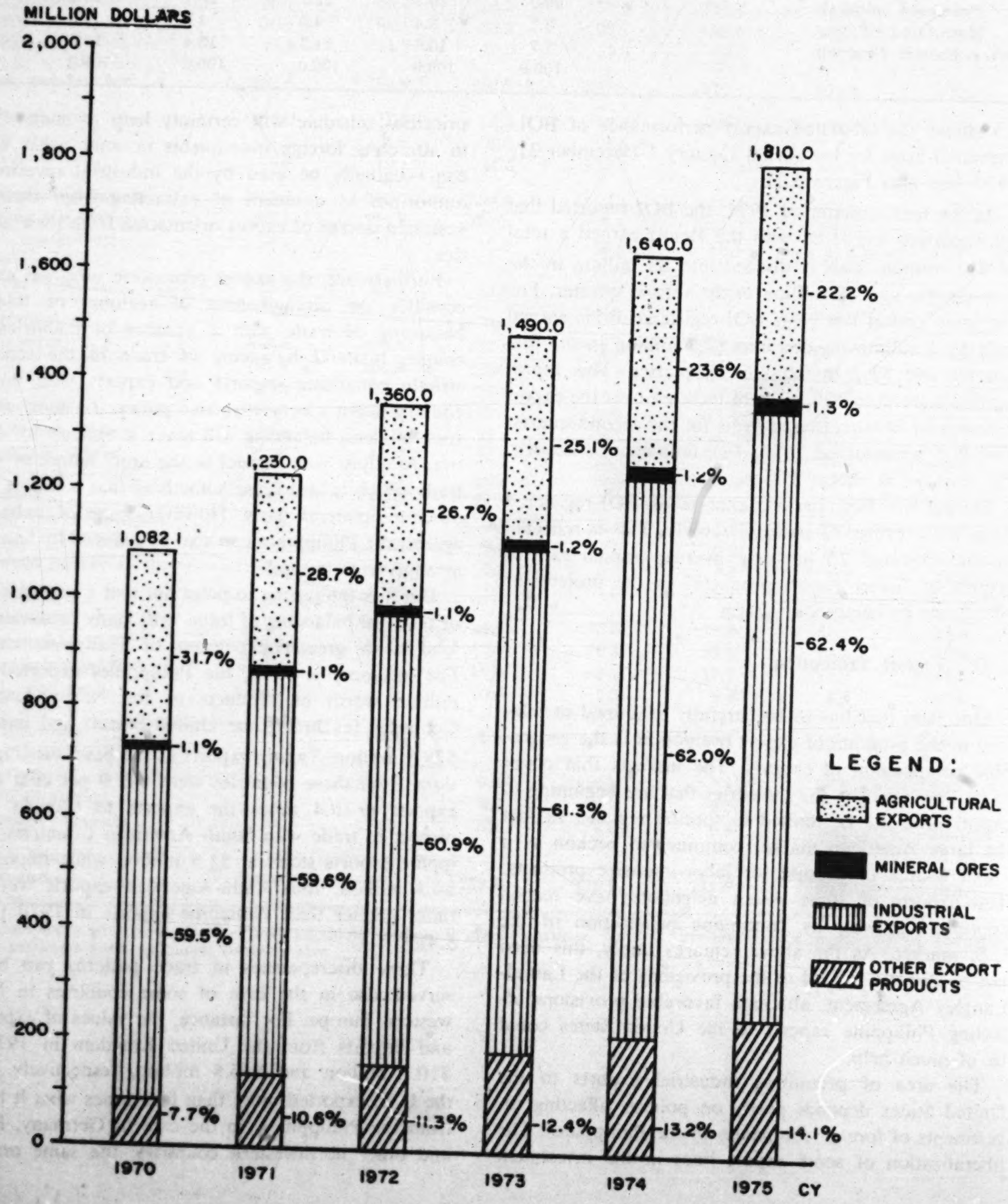


Table 5.3—EXPORT EARNINGS OF 37 REGISTERED FIRMS UNDER SCHEDULE E, BY PRODUCT, JANUARY-DECEMBER 1970
(In thousand U.S. dollars)

PRODUCTS	GRAND TOTAL JAN.-DEC. 1970 (U.S. $)	PER CENT DISTRIBUTION	1ST QTR. (U.S. $)	2ND QTR. (U.S. $)	3RD QTR. (U.S. $)	4TH QTR. (U.S. $)
GRAND TOTAL	17,805.7	100.0	2,672.4	3,683.6	4,859.2	6,590.5
Abaca & Synthetic rope	2,151.9	12.1	171.6	534.9	682.5	762.9
Air conditioning components	1.6	—	*	*	*	1.6
Beer	716.3	4.0	*	248.5	217.6	250.2
Cement	1,873.2	10.5	115.1	927.5	286.5	544.1
Chemicals	108.3	0.6	*	8.8	42.1	57.4
Food	79.7	0.4	*	*	53.9	25.8
Handicraft	297.8	1.7	30.5	26.7	212.0	28.6
Insecticides	47.9	0.3	37.3	2.8	6.1	1.7
Marble	1.6	—	**	**	1.6	**
Office & School Supplies	.8	—	*	*	.8	**
Paints & lacquer	161.7	0.9	13.0	13.0	34.6	101.1
Pharmaceutical products	43.6	0.2	10.4	14.1	12.6	6.5
Rubber shoes and sandals	1,099.2	6.2	191.3	449.1	347.7	111.1
Sewing machine cabinets	530.7	3.0	*	144.2	272.3	114.3
Shellcraft products	112.9	0.6	21.6	23.1	32.0	36.2
Textile products	3,070.9	17.3	628.5	4.4	1,086.0	732.0
Tinplates	5,689.1	32.0	1,094.7	184.5	1,056.1	3,353.8
Tires and tubes	238.6	1.3	27.8	*	96.0	114.8
Toothbrushes and containers	28.2	0.2	17.0	5.0	3.1	3.1
Synthetic wigs	1,459	8.2	313.6	477.1	415.8	253.2
Wooden furniture	92.1	0.5	*	*	*	92.1

* No exportation is recorded because the particular industries have not yet been registered with the BOI.
** No export for the quarter.

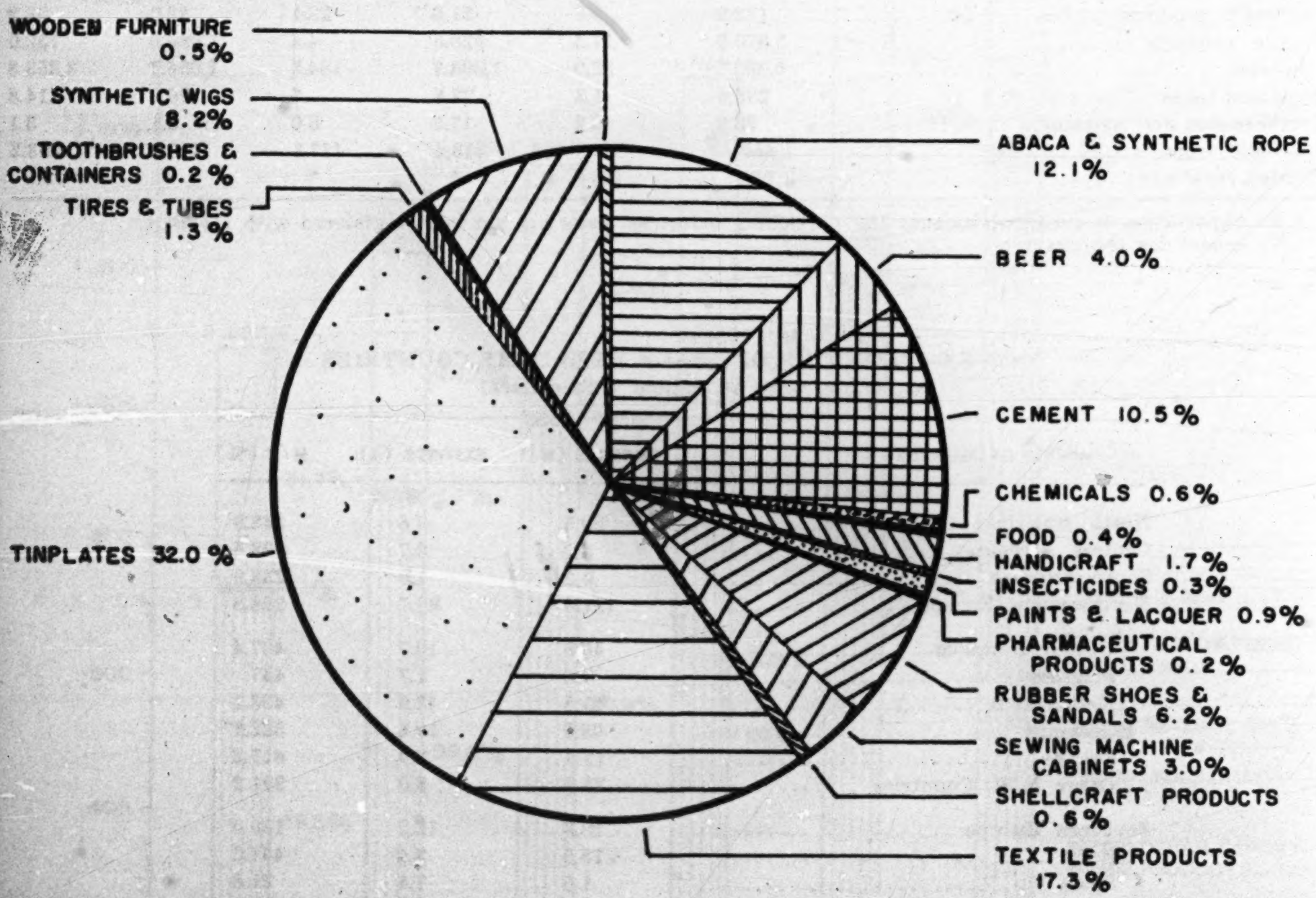
Table 5.4—DIRECTION OF TRADE WITH SOME COUNTRIES
(f.o.b. value in million U.S. dollars)

REGION OF COUNTRY	IMPORTS (M)	EXPORTS (X)	M/X (%)
North American Countries[a]	29.5	3.5	842.9
Central America	3.0	0.7	428.6
South America	4.3	1.8	238.9
Northwestern Europe	181.0	86.7	208.8
United Kingdom	46.8	10.7	437.4
Belgium	7.6	1.7	447.
Netherlands	21.5	43.6	493.1
Germany	63.9	19.8	322.7
France	17.9	2.9	617.2
Other N.W. Countries	23.3	8.0	291.2
Southern Europe	18.3	12.2	150.0
Italy	15.0	3.4	441.2
Spain	1.6	7.4	21.6
Other S.E. Countries	1.6	1.3	123.1
East Europe	0.7	—	—
Middle East	55.3	2.8	1,975.0
Oceania	57.0	4.8	1,187.5
Other Africa	1.2	2.7	44.4
Miscellaneous	1.9	0.2	950.0
Other U.S. Insular Possessions	0.4	2.9	13.8

[a] Excluding the United States.
Source: Central Bank of the Philippines.

Figure 5.2

PERCENTAGE DISTRIBUTION OF
EXPORT EARNINGS OF 37 REGISTERED FIRMS
UNDER SCHEDULE BY PRODUCT, JANUARY-DECEMBER 1970



things applies.

Some of these patterns may be due to poor export promotion, but efforts at making the existing unfavorable setup more obvious, especially to the governments, industrialists, and importers in particular countries, may encourage these countries to purchase more export products from the Philippines. Clearly, this implies that some corrections on the bilateral imbalance of trade against the Philippines must be made through a more aggressive information campaign on the part of the Philippines in these countries.

Regarding market prospects within the Asian region, any movement towards closer economic relations with ASEAN countries or with other countries in the region will ensure the expansion of the Philippines' trade with these countries. The general pattern of trade of the countries in the region is such that a substantial part of their foreign trade rests with the developed countries while very little trade exists among them. Thus, the rationalization of trade and tariff patterns in these countries will certainly expand trade within the region. Some efforts have been directed towards the attainment of this goal, such as the discussions on the establishment of a payments union and the integration of industries, specifically the automotive industry, on the basis of regional complementation.

E. Initial Market Penetration by New Export Products

Export promotion activities are closely related to the problem of initial market penetration by new export products. Such penetration is imperative if a successful diversification of exports is to be achieved. However, despite the existence of large markets for most of these products, breaking into the world market is fraught with many difficulties.

In the first place, countries that have earlier successfully penetrated the international market possess a major edge over other countries whose products are still attempting to enter the world market. This is true in spite of rising costs of production and a shifting relative advantage due to the changing economic structures of the former group of countries. But many of the problems in this area emerge from the imperfections of the world trading system itself. For instance, imperfect information, inadequate communication and the difficulties posed by quantitative and other non-tariff barriers are obstacles to the successful emergence of new export products. Some of these problems have been identified and discussed in studies of international trade not only in relation to some developed countries but also to others in varying degrees of development.

In view of these factors, it is necessary to put into effect a vigorous export promotion program for non-traditional exports. This can be enhanced by the creation of international marketing agencies which are important not only for trade information but also for establishing initial markets.

As the country's program of industrialization in labor-intensive industries proceeds, it must be realized that unless international marketing agencies are established, the entry of new export products into the world market would be very difficult. This is one reason why the many incentives available within the country for new export industries, including the attractiveness of the going exchange rate, need to be supported further by investments in the area of marketing information. Such investment is a duty not only of government but also of the private sector. In fact, these efforts can be better undertaken by the private sector.

Recent Developments in UNCTAD

These considerations make it more urgent to plan in accordance with the major developments in world trade that have emerged following the Kennedy Round discussions on the reduction of tariff barriers among different countries and the discussion among a number of countries concerning the trade of less developed countries, the latter being largely the end-product of work undertaken at the UNCTAD.

The neutral reduction of trade barriers by the industrialized countries is multilateral in character; hence, the tariff changes will benefit less developed countries. The need to become familiar with such development is of prime importance for the search for and promotion of markets for new export products.

In the UNCTAD, specifically, developments have given grounds for optimism in view of the recent expressed desire of European Common Market countries to extend preferences to less developed countries, including the Philippines. This is even more significant because of the eventual entry of the United Kingdom and other European countries into the Common Market. Moreover, Japan is presently considering the institution of such measures and indications point to the possibility of Japan adopting a scheme of preferential trade for less developed countries in the near future, maybe at the end of 1971.

Australia has for sometime now given unilateral preferential treatment for exports of less developed countries. The same is true with some countries which are seeking admission to the European Common Market. In the case of the United States, chances of unilateral

tariff reductions favorable to less developed countries are not as optimistic at this time, but recent developments may accelerate her acceptance of unilateral preferences to less developed countries. The adoption of such policy by the United States may mean a step away from bilateral preferences.

Of course, unilateral and/or bilateral preferential trade has existed since 1909 between the United States and the Philippines. However, although many benefits have been derived from the preferences provided for in the Laurel-Langley Agreement, particularly those in the case of sugar and coconut oil, the policies taken by the government in the past have not enabled the country to take full advantage of the tariff preferences because of the preoccupation with import-substituting industrialization.

When preferential trade is finally extended to all less developed countries, the Philippines will be only one such country among all other less developed countries. This situation all the more requires the institution of policies that will allow the country to derive the maximum benefits from the preferential treatment to be granted.

Accordingly, in order to benefit fully from the preferences to be given under the generalized system of preferences (GSP), the following should be undertaken:

1) A comprehensive study of the possible effects of the GSP to Philippine exports should be made. Some studies by the Tariff Commission on this matter are available; these might be updated to incorporate the latest GSP offers.

2) Decisions affecting investments should consider carefully the GSP provisions.

3) Philippine exporters should be informed of the concept and functions of the GSP, including the benefits that could be obtained from such a setup.

4) It is desirable to work for the inclusion of new export products that are of special interest to the Philippines, even if the GSP offers already contain product specifications and classifications.

Rules of Origin

In particular, the question of rules of origin which are presently being discussed at the UNCTAD are of great significance to the Philippines, if she is to take full advantage of the new preferential treatment that may be coming initially from the Common Market and Japan. These rules of origin provide the guidelines for ascertaining whether a product should be entitled to or should be excluded from preference.

The basic concept underlying the rules of origin is the requirement of **substantial transformation.** The main difficulty here is how "substantial" is to be defined, since this can be construed in various ways. To resolve this problem, the UNCTAD Working Group on Rules of Origin agreed on two alternative criteria, namely: (1) the process criterion and (2) the value-added criterion. Of the countries represented in the Working Group, the United States and Canada made clear their intention to use value-added requirement

In general, the former provides that goods can be considered to have been produced in a country if they have been produced in that country by meaningful productive activity. Thus, definitions and differences are drawn up between wholly produced goods, such as mineral and vegetable products, and goods produced by minimal processes, such as those manufactured by packing and repacking, assembling or splitting up into lots.

The value-added criterion is more specific. It provides that a certain percentage of the appraised value of a commodity should be attributable to the preference-receiving country; the rest can be imported content. No agreement has been reached, however, on what percentage is to be applied and on what value this percentage should be based; fifty per cent was proposed by at least two developed countries in the case of the former, and in the case of the latter, the majority agreed on using the ex-factory or f.o.b. value. In any case, some degree of flexibility is possible since the general criterion is the requirement of uniformity and simplicity in the rules of origin to be imposed by a preference-giving country.

Whatever specific definitions are finally adopted, the rules of origin are critical elements in any investment and export promotion programs for the future.

2. IMPORTS

As stated in Chapter 4, the increase in imports will depend on the rate of growth of exports and of GNP, the anticipated availability of external capital, and the change in the peso prices of imported goods relative to domestically produced goods. The faster is the expansion of the economy, the greater will be the amount of imports necessary to sustain that pace of development. This relationship can readily be seen by considering that a growing economy like the Philippines depends to some extent on the supply of machinery and equipment and industrial raw materials, a large portion of which must be obtained from abroad.

Table 5.5 contains a detailed listing of imports by

Table 5.5—IMPORTS BY COMMODITY GROUP, 1963-69
(Value in million U.S. dollars)

COMMODITY	AVERAGE 1963-69	PER CENT DISTRIBUTION
Consumer Goods	174.3	18.6
Live animals chiefly for food	0.2	—
Meat and meat preparation	5.6	0.6
Dairy products, eggs and honey	28.4	3.0
Fish and fish preparations	16.4	1.8
Cereals and cereal preparations	62.3	6.6
Fruits and vegetables	8.2	0.9
Sugar and sugar preparations	0.3	—
Coffee, tea, cocoa, spices and manufactures thereof	3.5	0.4
Feeding stuffs for animals	4.3	0.5
Miscellaneous food preparations	1.2	0.1
Beverages	1.2	0.1
Tobacco	3.9	0.4
Prefabricated building, sanitary plumbing, heating and lighting fixtures and fittings	1.9	0.2
Furnitures and fixtures	3.6	0.4
Travel goods, handbags, similar articles	—	—
Clothing	1.9	0.2
Footwear	0.1	—
Prof. scientific and controlling instruments	8.9	1.0
Miscellaneous manufactured articles	11.8	1.3
Returned goods and special transactions	10.6	1.1
Capital Goods	339.2	36.1
Machinery and parts, other than electrical	181.7	19.3
Electrical machinery, apparatus and appliances	46.0	4.9
Transport equipment	107.8	11.5
Live animals, not for food	3.7	0.4
Intermediates	425.9	45.3
Hides, skins and fur skins, undressed	0.5	0.05
Oil seeds, oil nuts and oil kernels	7.5	0.8
Crude rubber including synthetic and reclaimed	4.8	0.5
Wood, lumber and cork	5.0	0.5
Pulp and waste paper	3.7	0.4
Textile fibers, not manufactured into thread or yarn	32.3	3.4
Crude fertilizer, minerals except coal and precious stones	3.8	0.4
Metallic ferrous ores and metal scrap	4.7	0.5
Animal and vegetable crude materials, inedible	1.6	0.2
Mineral fuels, lubricants and related materials	86.5	9.2
Chemical elements and compounds	24.5	2.6
Mineral tar and crude chemicals from coal, petroleum and natural gas	0.2	—
Dyeing, tanning and coloring materials	7.2	0.8
Medicinal and pharmaceutical products	10.4	1.1
Essential oils, perfume materials toilet, polishing and cleaning preparations	3.9	0.4
Fertilizers, manufactured	8.6	0.9
Explosives and miscellaneous chemical products	30.3	3.2
Animal and vegetable oils (not essential)	4.3	0.5
Leather manufactures, necessary and dressed furs	0.5	0.05
Rubber manufactures	5.8	0.6
Wood and cork manufactures	4.7	0.5
Paper and paper board manufactures	24.1	2.6
Textiles yarns, fabrics and made-up articles	28.0	3.0
Non-metallic mineral manufactures	10.5	1.1
Gold, silver, platinum gems and jewelry	—	—
Base metals	88.8	9.5
Manufactures of metals	23.7	2.5
TOTAL	939.5	100.0

commodity group for the period 1963-69. The average imports for 1963-69 are shown together with the percentage shares of each item in the total. Consumer goods imports accounted for 18.6 per cent of total imports while capital and intermediate goods imports, for 81.4 per cent. Intermediate goods imports averaged $425.9 million between 1963 and 1969; of these a large portion is accounted for by the folowing: textile fibers ($32.3 million), mineral fuels ($86.5 million), chemical elements ($24.5 million), explosives ($30.3 million), pulp and paper products ($24.1 million), textile yarns ($28.0 million), base metals ($88.8 million), and metal manufactures ($23.7 million). The average of capital goods imports from 1963 to 1969 was $339.2 million. Of this amount, $181.7 million went to imports of machinery other than electrical, $107.8 million to transport equipment, $46 million to electrical machinery, and $3.7 million to live animal imports.

It is significant to note that out of the largest ten imports, eight were, and still are, capital and intermediate goods imports. These imports, including their actual values in 1970, are shown separately in Table 5.6 (See also Figure 5.3.) They accounted for 63.7 per cent of total imports from 1963 to 1969 and for 72.5 per cent of total imports in 1970. These consist of imports of machinery, other than electrical; base metals; transport equipment; mineral fuels and lubricants; electrical machinery, apparatus and appliances; explosives; textile fibers not manufactured into yarns; and chemical elements and compounds. Imports of machinery, excluding electrical items, already account for 13.3 per cent of total imports in 1963-69 and for 21.6 per cent in 1970. The first five imports, which include base metals, mineral fuels, transport equipment, and electrical machinery imports, account for more than one-half of total imports both in 1963-69 and 1970

While all investment policies are now designed to reduce the import dependent character of industry, these cannot be pushed within a short period of time beyond a level dictated by the natural dependency of some domestic industries on the foreign supply of raw materials and capital goods. This is readily evident from Table 5.7 which shows the estimated import dependency of manufacturing supplies for the period 1963-68. Import dependency here is measured as the ratio of imports over total manufacturing supplies. The latter represents domestic value added plus imports.

For consumer goods industries, the categories with the highest dependency ratios are textiles, food, furniture and fixtures, leather and leather products, and fur products. The average import dependency ratio for food for the period 1963-68 is 35.3 per cent; for textiles, 57 per cent; for furniture and fixtures, 15 per cent; and for leather and fur products, 29.6 per cent. In the case of intermediate goods production, chemicals and chemical products shows the highest dependency ratio (68.1 per cent), followed by metal products, excluding machinery and transport equipment (64.6 per cent), paper and paper products (58.4 per cent), nonmetallic mineral products (22.2 per cent), and rubber products (18.1 per cent).

As expected, capital goods industries are very import-dependent. Machinery, excluding electrical machinery, has a dependency ratio of 93.7 per cent for 1963-68, while transport equipment has 77.7 per cent, and electrical machinery, apparatus, appliances and supplies, 57.1 per cent. The high dependency ratios in intermediate (53.3 per cent) and capital goods (81 per cent) production account for the almost 50 per cent import dependency ratio for total manufacturing. These circumstances clearly indicate that the special needs of the future will continue to be capital goods and intermediate raw materials imports.

However, one cannot set a very high rate of growth of GNP simply by allowing these types of imports to grow unconstrained without creating strong pressures

Table 5.6—PRINCIPAL IMPORTS, CY 1963-70
(f.o.b. value in million U.S. dollars)

ITEM	AVERAGE 1963-69	PER CENT DISTRIBUTION	1970	PER CENT DISTRIBUTION
TOTAL IMPORTS	939.5	100.0	1,090.1	100.0
Principal Imports	598.0	63.7	790.5	72.5
Machinery other than electrical	181.7	19.3	235.2	21.6
Base Metals	88.8	9.5	144.4	13.2
Mineral fuels and lubricants and related materials	86.5	9.2	118.9	10.9
Transport equipment	107.8	11.5	106.1	9.7
Electrical machinery, apparatus and appliance	46.0	4.9	59.2	5.4
Explosives and miscellaneous chemical materials	30.3	3.2	49.8	4.6
Textile fibers not manufactured into yarns	32.3	3.4	40.2	3.7
Chemical elements and compounds	24.5	2.6	36.7	3.4
Others	341.5	36.3	299.6	27.5

Figure 5.3

PRINCIPAL IMPORTS
1963-69 AND 1970

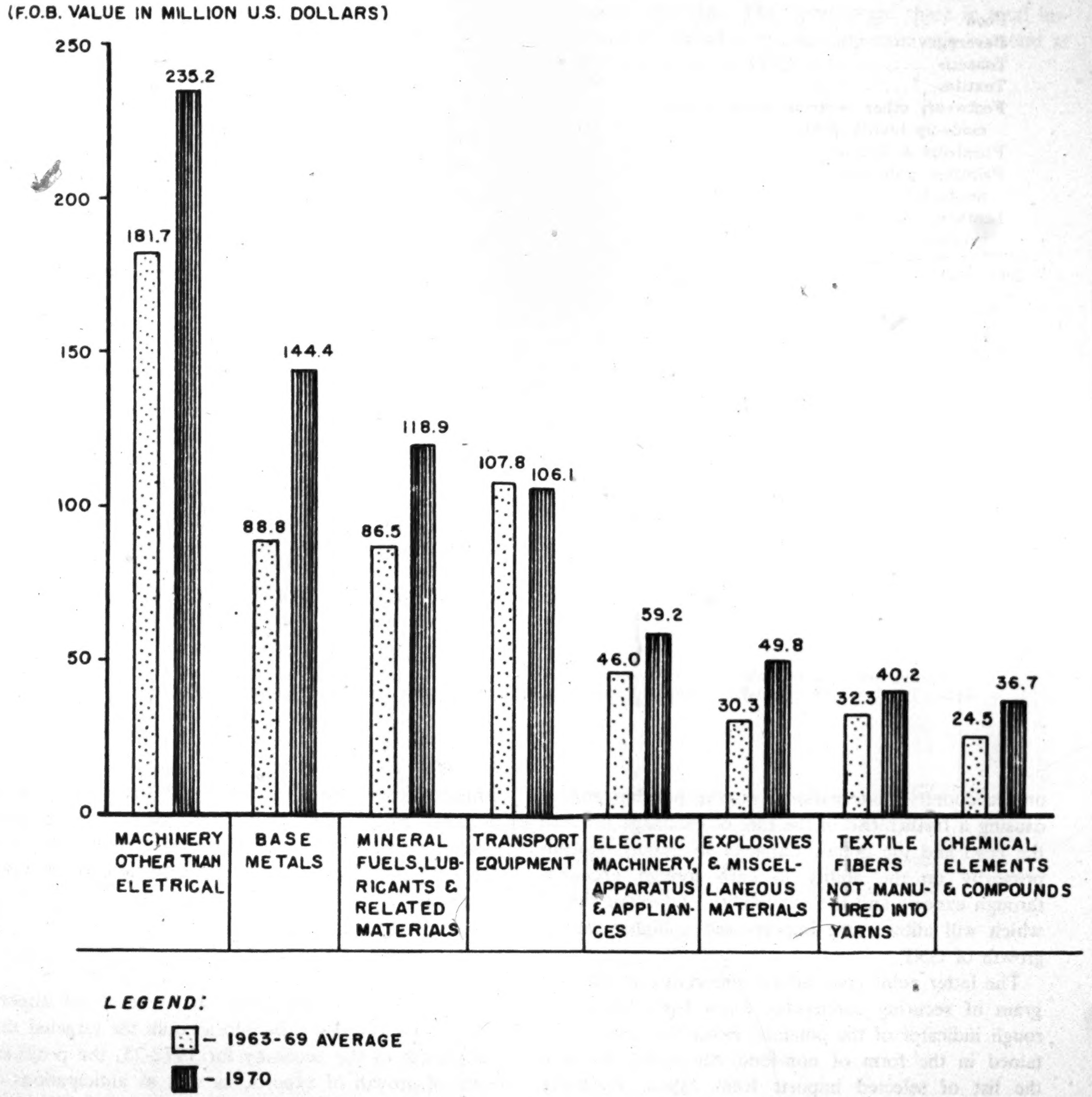


Table 5.7—ESTIMATED IMPORT DEPENDENCY OF MANUFACTURING SUPPLIES, 1963-68
(Imports as per cent of total supplies)

	1963	1964	1965	1966	1967	1968	AVERAGE 1963-68
Total Manufacturing	44.2	49.2	49.5	48.9	53.1	51.9	49.5
Consumer Goods	25.9	27.4	29.6	28.4	31.4	28.9	28.6
Food	30.2	34.4	40.9	34.8	39.1	32.6	35.3
Beverages	1.5	1.7	2.2	1.3	1.8	1.6	1.7
Tobacco	4.3	2.2	2.6	6.5	9.4	12.3	6.2
Textiles	52.9	51.4	49.8	62.1	58.5	66.9	56.9
Footwear, other wearing apparel and made-up textile goods	4.2	6.9	4.6	3.9	1.5	1.5	3.8
Furniture & fixtures	17.3	17.3	11.8	11.3	14.5	17.8	15.0
Printing, publishing and allied products	0	0	0	0	0	0	0
Leather, leather products and fur products	20.0	35.7	28.6	28.6	31.3	33.3	29.6
Intermediate Goods	50.0	55.0	53.6	52.5	54.6	54.3	53.3
Wood, cane and cork	2.0	3 2	3.2	2.4	1.7	1.4	2.3
Paper and paper products	56.2	61.8	58.2	58.4	59.4	56.6	58.4
Rubber products	27.9	32.1	29.3	29.2	26.2	24.2	18.1
Chemicals and chemical products	68.8	70.9	68.0	65.7	67.2	68.0	68.1
Non-metallic mineral products	21.5	25.6	20.7	22.5	22.9	19.7	22.2
Metal products, except machinery and transport equipment [1]	61.0	66.0	64.0	62.9	66.2	67.4	64.6
Miscellaneous manufactured products	28.2	37.2	42.0	40.7	42.4	42.0	38.8
Capital Goods	74.0	80.1	81.6	81.0	84.3	84.6	80.9
Machinery except electrical machinery	92.1	93.7	93.9	93.1	95.0	94.5	93.7
Electrical machinery, apparatus appliances and supplies	48.7	58.3	61.3	52.8	57.5	64.1	57.1
Transport equipment	66.7	76.5	79.2	80.6	81.9	81.4	77.7

[1] Includes products of petroleum and coal.
Note: Total supply represents domestic value added plus imports of corresponding category.

on the country's international reserve position and/or causing a further rise in the rate of exchange between the peso and the dollar. Capacity to import depends primarily on the ability to earn foreign exchange through exports and the availability of foreign capital which will allow more imports and a higher rate of growth of GNP.

The latter point gives added importance to the program of securing commodity loans from abroad. A rough indicator of the potential items that can be obtained in the form of non-food commodity loans is the list of selected imports from Japan, Australia, Canada, and New Zealand in 1970. These are presented in Tables 5.8 and 5.9. The selected material imports from Japan constitute 30 per cent of total imports from Japan, while the corresponding percentage share of those in Australia, Canada and New Zealand are 52 per cent, 51 per cent and 18 per cent, respectively.

A. Import Projections

In view of the foregoing, the forecasts of imports for the Plan period take into account the targeted rate of growth of the economy for 1972-75, the projected rate of growth of exports, as well as anticipations of forthcoming concessionary loans which will allow additional imports of investment goods.

Total imports are projected to increase by an annual average growth rate of 10.8 per cent. The projections of imports classified according to end-use and the percentage distribution of imports are presented in Tables 5.10 and 5.11 respectively. The latter is shown graphically in Figure 5.4. Machinery and equipment imports will increase at an annual average rate of 17.1 per cent, in view of the expected concessionary loans intended to finance this type of imports. Thus, the share of machinery and equipment in total imports will increase from 18.8 per cent in 1970 to 21.4 per cent in 1973 and to 24 per cent in 1975.

Imports of unprocessed raw materials will grow by 11 per cent per year while those of semi-processed raw materials, by 9 per cent per year. The former will account for roughly 15 per cent of total imports throughout the Plan period; the latter's share in the total will decline from 54.6 per cent in 1970 to 50.4 per cent in 1975. Consumer goods imports will expand by 12 per cent annually, with durable goods increasing by 10 per cent per year and non-durable goods by 12 per cent per year. Their percentage share in total imports is projected to remain approximately constant at 6.8 per cent up to 1975.

Table 5.8—SELECTED IMPORTS FROM JAPAN, 1970
(f.o.b. value in thousand U.S. dollars)

Synthetic rubber and rubber substitutes	1,738
Discontinuous synthetic or artificial textile fibers, not corded or otherwise prepared for spinning	17,824
Cellulosies, excluding vulcanized fiber	1,771
Polyethylenes	3,764
Synthetic plastic materials in primary forms	6,453
Bookpaper, uncoated	1,705
Filament weaving yarns for use by integrated textile mills	5,015
Tire cloth and tire fabrics	2,050
Blooms, slabs and billets and roughly forged pieces	13,863
Iron and steel coils for rerolling	14,473
Copper ingots, slabs and pigs	1,704
Copper bare wire	2,930
Zinc ingots, slabs and pigs	1,458
Other iron and steel plates, uncoated, n.e.s.	16,839
Plates and sheets of alloy and high carbon steel, coated	1,084
Other fabricated structural materials, iron and steel, n.e.s.	2,830
Tractor, crawler type, gasoline or kerosene	1,356
Trucks, buses and lorries, diesel or semi-diesel, unassembled	2,153
Trucks, buses and lorries, other than diesel or semi-diesel, unassembled	2,628
Total	$101,638
Total Imports from Japan	$344,869

Source: Central Bank of the Philippines.

Table 5.9—SELECTED IMPORTS FROM AUSTRALIA, CANADA, AND NEW ZEALAND, 1970
(f.o.b. value in thousand U.S. dollars)

SELECTED IMPORTS FROM AUSTRALIA, 1970	
Dry Skim Milk	2,833
Malt, ground or roasted including barley malt	2,863
Meat meal	1,212
Animal tallow	1,011
Tire cloth and tire fabrics	1,121
Blooms, slabs, and billet and roughly forged pieces	14,009
Lead ingots, slabs and pigs	1,394
Zinc ingots, slabs and pigs	1,493
Total	$ 25,936
Total Imports from Australia	$ 50,136
SELECTED IMPORTS FROM CANADA, 1970	
Wheat and spelt, including meslin, unmilled	493
Malt ground or roasted including barley malt	1,283
Newsprint paper in rolls and sheets	3,038
Zinc ingots, slabs and pigs	1,048
Trucks, buses and lorries, other than diesel or semi-diesel	3,384
Total	$ 9,246
Total Imports from Canada	$ 17,998
SELECTED IMPORTS FROM NEW ZEALAND, 1970	
Meat of bovine cattle	419
Meat of sheeps or lambs	48
Dry skim milk	520
Meat meal	208
Total	$ 1,195
Total Imports from New Zealand	$ 6,831

Source: Central Bank of the Philippines.

Table 5.10—IMPORTS CLASSIFIED ACCORDING TO END-USE, 1970-75
(f.o.b. value in million U.S. dollars)

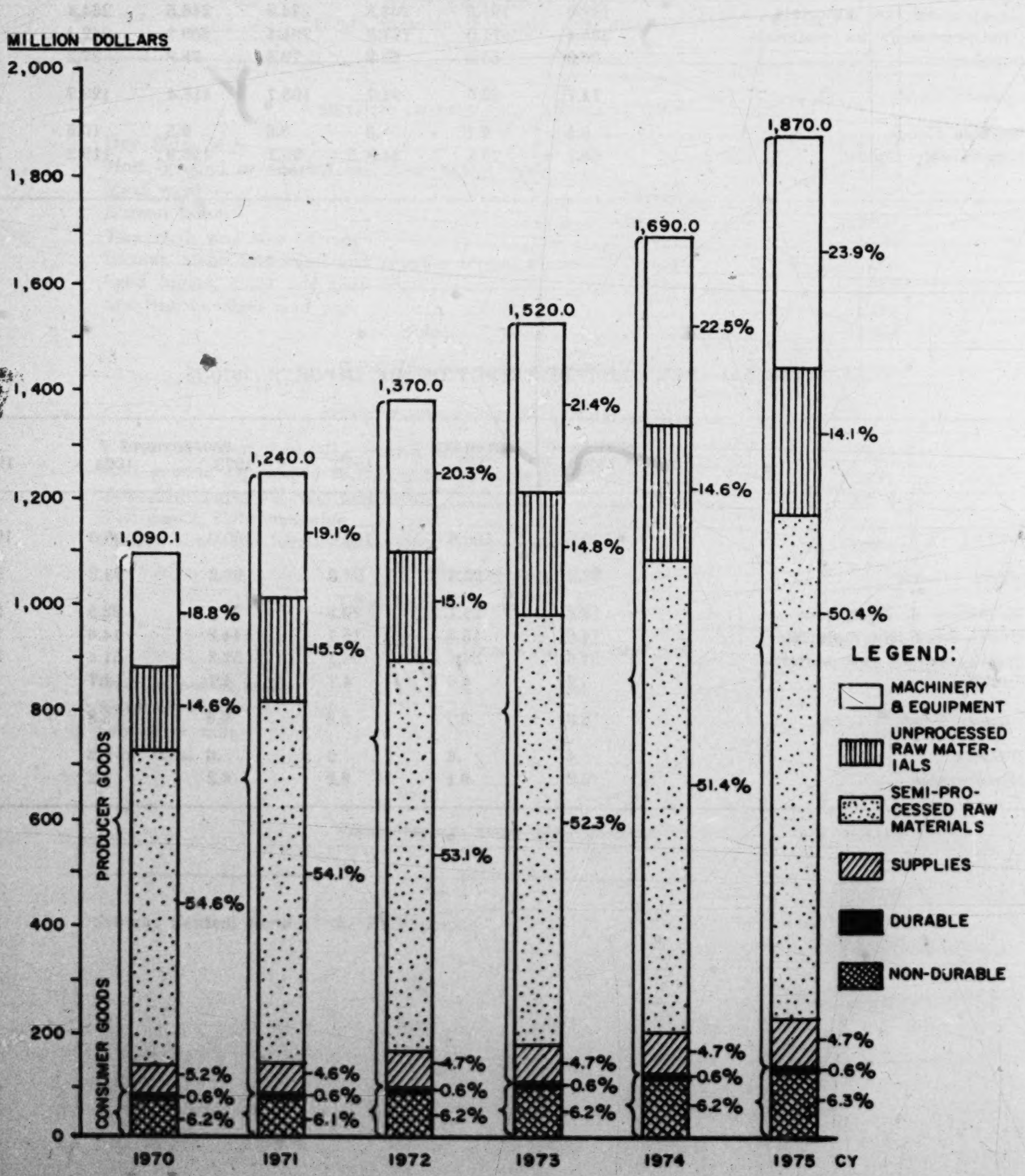
	ACTUAL 1970	ESTIMATE 1971	1972	PROJECTIONS 1973	1974	1975	AVERAGE ANNUAL GROWTH RATE 1971-75
TOTAL IMPORTS	1,090.1	1,240.0	1,370.0	1,520.0	1,690.0	1,870.0	10.8
Producer Goods	1,015.5	1,157.5	1,277.3	1,416.3	1,574.6	1,740.3	10.7
Machinery and equipment	205.2	237.1	278.9	326.1	379.6	446.2	17.1
Unprocessed raw materials	158.0	191.9	206.8	224.9	246.5	264.4	10.8
Semi-processed raw materials	595.4	671.0	727.8	794.4	869.7	942.4	9.0
Supplies	56.9	57.5	63.8	70.9	78.8	87.2	11.0
Consumer Goods	74.7	82.5	92.7	103.7	115.4	129.7	12.0
Durable Goods	6.5	7.1	7.8	8.6	9.5	10.5	10.3
Non-durable Goods	68.1	75.4	84.9	95.1	105.9	119.2	12.2

Table 5.11—PER CENT DISTRIBUTION OF IMPORTS, 1970-75

	ACTUAL 1970	ESTIMATE 1971	1972	PROJECTIONS 1973	1974	1975
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
Producer Goods	93.2	93.3	93.2	93.2	93.2	93.1
Machinery & Equipment	18.8	19.1	20.3	21.4	22.5	23.9
Unprocessed raw materials	14.6	15.5	15.1	14.8	14.6	14.1
Semi-processed raw materials	54.6	54.1	53.1	52.3	51.4	50.4
Supplies	5.2	4.6	4.7	4.7	4.7	4.7
Consumer Goods	6.8	6.7	6.8	6.8	6.8	6.9
Durable	.6	.6	.6	.6	.6	.6
Non-Durable	6.2	6.1	6.2	6.2	6.2	6.3

Figure 5.4

PERCENTAGE DISTRIBUTION OF IMPORTS
CY 1970-75



CHAPTER 6
Financing the Development Plan

1. GENERAL CONSIDERATIONS

The development plan hinges on financial resources that can be mobilized for purposes of capital formation. The mechanics of bringing this about depends on the capacity of the tax system to generate taxes, the allocation between ordinary governmental services (identified as government consumption) and capital development expenses, the mobilization of private savings into development, and the use of external resources that could be harnessed through loans and other forms of assistance.

A. Taxation

An increase of the tax effort through administrative reforms and other executive actions has been part of continuous government policy. Administrative efforts designed to improve the collecting capacity of the revenue collection agencies — the Bureau of Internal Revenue and the Bureau of Customs — have been a conscious design; and, as widely recognized, some of the administrative measures are to be tied with legislative support related to amendments of existing laws.

The total revenue effort of the government has reached a high level in FY 1971, especially with the passage of the stabilization tax, which was a percentage tax on principal exports. Unfortunately, this tax will decelerate until it disappears by the end of FY 1974. Efforts on the part of the government to extend these rates to finance high priority projects have met with stiff opposition from the legislature. Thus, the total revenue effort as a percentage of the GNP which reached about 14 per cent in 1971 may decline in part due to this deceleration, if no new tax measures are made to replace them.

There are, of course, continuing measures being undertaken to improve the tax effort. Through corrective measures designed to improve customs collections, the executive availed of its powers under the Tariff Code to pass tariff rate increases in some high-yield imports and also made efforts to close administrative loopholes in tariff administration.

Nevertheless, it must be pointed out that the record of a high response yield of taxes with respect to income has been verified. A percentage increase in GNP has been estimated to result in a 1.06 per cent increase in revenues; in technical language, this is a relatively more than unitary elasticity of the tax system.

Some problematic areas, however, exist which prevent maximum utilization of tax proceeds. Total tax receipts do not entirely accrue to the government sector to allow it full freedom in the allocation of tax resources. Special funds are created by taxes and sometimes are out of government reach. For instance, 25 per cent of the stabilization tax proceeds were legislated to go back to the private sector through the Development Bank of the Philippines mainly to finance exports. This is just one form of "tie-ing". The other is the prevalence, in many cases, of excessive tax exemption laws which reduce the tax base and also lead to considerable distortions of some incentives related to investments.

In addition to the existing tax base, the Four-Year Development Plan continues to stress the passage of more tax laws and reforms related towards strengthening the development base through a reform of the tax structure. The following are therefore being proposed:

1. Amendment of the Stabilization Tax Law so as not to diminish the rates due for reduction during the next fiscal year. The additional proceeds from this amendment will be used to finance the land reform program and the development of agricultural productivity;
2. Authorization of the sale of military camps and other valuable idle property to further augment resources for the land reform program;
3. Imposition of a tax on affluent consumption such as luxury houses and other symbols of conspicuous consumption to finance a low-cost housing program for low-salaried employees;
4. Revision of the structure of the transfer taxes including the inheritance tax to reduce inherited wealth and thereby reduce income inequality;
5. Imposition of a development tax on imports to finance capital projects in the development program;
6. Legalization of gambling with the necessary controls and imposition of fees and other taxes on certain forms of gambling to enable the government to regulate this activity.

7. Raising the specific tax on distilled spirits and fermented liquors;

8. Increasing charges on forest products;

9. Reform of the tariff structure with a view to simplifying it and making it revenue productive;

10. Revision or repeal of certain tax exemption laws;

11. Imposition of a tax on idle lands;

12. Imposition of a special income tax on those engaged in extractive industries;

13. Removal of the residence tax and in lieu thereof imposing an annual fee for the registration of tax account numbers; and,

14. Increasing wharfage fees as a source of fund for portworks expenditures.

Efforts towards reforms and tax administration still play an equally crucial role. The following bills recommended by the Tax Commission are deserving of special attention:

1. Establishment and maintenance of a career internal revenue and customs service;

2. Amendment of Section 12 of the National Internal Revenue Code (reassignment of internal revenue agents and other employees to other duties);

3. Amendment of Section 309 of the National Internal Revenue Code (limiting the authority of the Bureau of Internal Revenue to compromise any civil or criminal case);

4. Amendment of Section 8 of the National Internal Revenue Code by providing for the creation of a Revenue Regional Office and Revenue Districts and providing for the powers and duties of Regional Directors;

5. Requiring the presentation of proof of income tax payment before any document of transfer affecting any real property or property rights or any motor vehicle can be registered;

6. Amendment of Section 261 of the National Internal Revenue Code by limiting the enjoyment of the exemption from amusement taxes for shows held by, for, or in behalf of duly registered charitable institutions or associations; and

7. Amendment of Section 6, Chapter II, Article 1 of Republic Act 1603 (the Land Transportation and Traffic Code) requiring submission of a tax clearance or tax receipts by operators of common carriers and transportation contractors.

B. Government Consumption vs. Investment

The provision, through investment, of ordinary services not only for the present but also for the future is an inescapable function of government. Normally, the important rule would be to assign more of the growth in government resources to capital expenses. But both of these functions expand over time, as a consequence of population growth, economic development, and urbanization.

The demand for increasing government consumption has grown substantially lately. This became pronounced due to the eruption of civil disturbances in the cities which has raised current expenses for the maintenance of civil order. Some of these events have led to the increase in demand of large groups for wage increases and for other types of services. Of course, many of these demands are often met only at the expense of investments. The experience, for instance, behind the recent stabilization program of 1970 led to a temporary sacrifice of infrastructure programs by a reduction of their level.

But the conscious development policy in this regard is to allow a growth of government consumption at a much lower level than that of spendings for investment. Thus, the target growth rate for government consumption is only about four-fifths of the growth of GNP. This is necessary so as to assign relatively more of the increases in public resources to investment.

C. Mobilization of Savings

Compulsory pension schemes like social security and government insurance continue to provide savings resources. So do voluntary savings through the banking system and other forms of voluntary saving, including insurance.

Savings generated by government financial institutions have found their way into the development stream either to the private sector in the form of development loans or to the government by holding governmental bonds and other forms of indebtedness.

The traditional mechanics for encouraging savings for private investment is in the form of various fiscal incentives for investment. This is especially true of laws on investment and export incentives and other tax exemption laws. Whether these laws have some effects on the actual volume of savings or not, the potentials of a much larger buildup of savings into the economy than currently obtains may be realized through a more realistic interest rate policy discussed in Chapter 2 of this Plan.

D. External Sources of Aid and other Flows

External sources of capital assistance are various. There are "official development assistance" and ordi-

nary commercial flows.

The most significant development in this area was the organization of a Consultative Group for the Philippines under the chairmanship of the World Bank in April 1971. The principal functions of the Consultative Group is to facilitate coordination of aid and other external flows to the Philippines so that they can move to supplement development projects. The Group has also been effective in creating a forum for an understanding of the serious external debt position, already explained in the balance of payments section, which is unduly difficult and which was a result of the failure to have some "early warning device" on the implications of certain types of external debt positions prior to 1970.

The recent enactment of a new foreign borrowing law plus the organization of an external debt management office at the Central Bank has instituted corrective measures for an orderly planning of the external debt.

The increase of external development assistance and other forms of commercial flows, whether on a multilateral (i.e., through the World Bank, Asian Bank, the UN Development Program) or on a bilateral basis is a major objective of development financing during the current Four-Year Development Plan.

2. DOMESTIC FINANCE

In terms of policy objectives, what the fiscal sector sought to achieve in FY 1971 was to balance its budget through a reduction in current operating expenditures and an increase in total tax revenue. On the basis of all fiscal operations the gap between income and expenditures was small. This was a result of the following factors: **a)** current expenditures increased at a decelerating rate; **b)** proceeds from the export tax of about ₱443 million augmented total tax revenue; c) severe cutbacks in the infrastructure program reduced capital expenditures significantly; and **d)** domestic borrowings were confined to non-inflationary sources as envisioned in the previous Four-Year Development Plan. The government was able to maintain its policy of fiscal restraint which was initiated during the second half of FY 1970 as one of the emergency measures intended to reduce internal and external instability.

The basic assumption in the projections of government expenditures for the Plan period is that total expenditures will grow at an average annual rate of 8 per cent.[1] Current expenditures will rise at a lower growth rate of 6.4 per cent compared to capital expenditures which are targeted at 16 per cent per annum (see Table 6.1). The slower growth of current expenditures will free resources for capital expenditures. In other words, any adjustment which fiscal policy has to consider is necessarily biased against a high growth in current expenditures.

A. Projections of National Government Fiscal Operations

The increase in total expenditures of the national government during the Plan period will account for about 14.0 per cent of the increase in Gross National Product. The share of current expenditures on goods and services to total current outlay will rise from 77.0 per cent in FY 1971 to 79.0 per cent in FY 1975. On the other hand, the share of capital outlay to total expenditures of the national government will expand from 15 per cent in FY 1971 to 20.0 per cent in FY 1975. Out of the increase in capital expenditures (local plus national) equal to ₱2,657 million from FY 1972-75, about 70.0 per cent is contributed by the national government.

The projections of government expenditures by economic-functional classification are shown in Tables 6.2 and 6.3. Consistent with the overall policy of channeling more resources into public investments, capital expenditures exhibit higher average growth compared to current expenditures for the whole Plan period.

Expenditures for economic development will have an average annual growth of 11 per cent while those for social development will grow at 6.8 per cent yearly (see Table 6.2). Both economic and social development expenditures will continue to absorb the biggest portions of total expenditures. During the four fiscal years, the average shares of the various expenditure categories are as follows: economic development, 32 per cent; social development, 35.0 per cent; debt service, 7.0 per cent; and, general government and other expenditures, 27.1 per cent.

On the revenue side, receipts are expected to reach ₱6,014 million in FY 1975 from an estimate of ₱4,291 million in FY 1972. This target is attainable at an average annual growth of 11.2 per cent assuming that all other things will remain the same. The significant role of tax revenues in providing finances for government operations will be maintained as reflected in the share of total tax revenue to total tax receipts of about 88.4 per cent (see Table 6.1).

Current surpluses generated will exceed those obtained in the past decade. The projection of a favorable financial gap points to the emphasis on the revenue potential of present tax laws and on the additional revenue that could be collected from the outstanding

[1] Government receipts and expenditures are in current prices.

Table 6.1—NATIONAL GOVERNMENT FISCAL OPERATIONS
(All funds combined, in million pesos and at current prices)

	ESTIMATE [1] FY 1971	FY 1972	PROJECTED FY 1973	FY 1974	FY 1975	AVERAGE ANNUAL GROWTH (%) FY 72-FY 75
A. CURRENT OUTLAY						
1. Current Expenditures on Goods & Services [2]	2,677	2,933	3,115	3,311	3,505	7.0
2. Subsidiaries	15	10	14	15	16	
3. Current Transfer	432	442	472	504	535	
4. Debt Service & Interest	348	426	331	364	396	
TOTAL CURRENT OUTLAY	3,472	3,811	3,932	4,194	4,452	6.4
B. RECEIPTS						
1. Revenue from Taxation	3,460	3,814	4,229	4,728	5,319	11.4
2. Earnings & Other Credits	451	456	486	537	600	
3. Others	20	21	49	68	95	
TOTAL RECEIPTS	3,931	4,291	4,764	5,333	6,014	11.2
C. CURRENT SURPLUS (DEFICIT) B-A	459	480	832	1,139	1,562	
D. CAPITAL OUTLAY						
1. Gross Capital Formation	376	479	546	627	751	18.9
2. Capital Transfer	149	197	205	220	233	
3. Direct Lendings	86	87	104	111	118	
TOTAL CAPITAL OUTLAY	611	763	855	958	1,102	15.9
LESS: Current Surplus	459	480	832	1,139	1,562	
E. GROSS FINANCIAL GAP	152	283	23	(181)	(460)	
TOTAL OUTLAY	4,083	4,574	4,787	5,152	5,554	8.02

[1] Source: Budget Commission
[2] Includes expenditures on "development services." Excludes capital outlays of government corporations.

collectible accounts of the BIR and Customs. Improvements in tax administration and collection efficiency could absorb the financial slack which may result from the failure of Congress to enact important new tax measures.

Tax receipts projections indicate an increase in the tax effort of the Philippines from 10.8 per cent in FY 1971 to about 12.0 per cent in FY 1975, excluding the export tax, GSIS and SSS premiums. Including the export tax, the relevant ratio in FY 1971 was about 14 per cent; but as earlier indicated, the inability to extend the export tax beyond 1974 wil reduce the total revenue effort by 1975 if no new tax measures are legislated.

B. Infrastructure Program, FY 1972-FY 1975

Table 6.4 summarizes the Four-Year Infrastructure Program for FY 1972-75, indicating annual investment requirements. This program includes the capital outlays of the national government and government corporations. (see also Figure 6.1.)

Peso requirement for infrastructure will expand from ₱895.0 million in FY 1972 to ₱1,102.0 million in FY 1975, representing an increase of 8 per cent per year. Dollar requirements of $96.2 million, $110.2 million, $146.3 million and $146.3 million will be needed in FY's 1972, 1973, 1974 and 1975, respectively.

The main domestic sources of funds will be general revenue, special funds/earnings, corporate bonds and the export tax. The proceeds from the export tax, however, are expected to decelerate until FY 1975, when it totally disappears. Of the four-year total about ₱4.0 billion, general revenue accounts for 46 per cent; special funds/earnings, 22 per cent; and corporate bonds, 19 per cent. The rest is accounted for by PW & ED bonds and the export tax (see Tables 6.5, 6.6, and Figure 6.2).

Table 6.2—NATIONAL GOVERNMENT FISCAL OPERATIONS: ECONOMIC-FUNCTIONAL CLASSIFICATION
(All funds combined, in million pesos, at current prices)

EXPENDITURE CLASSIFICATION	ESTIMATE[1] FY 1971	PROJECTED FY 1972	FY 1973	FY 1974	FY 1975	AVERAGE ANNUAL GROWTH (%) FY 72-FY 75
1. Economic Development	1,166	1,395	1,489	1,601	1,755	10.8
Current	605	699	755	794	832	8.3
Capital	561	696	734	807	923	13.4
2. Social Development	1,458	1,550	1,657	1,776	1,894	6.8
Current	1,421	1,499	1,584	1,686	1,789	5.9
Capital	37	51	73	90	105	30.3
3. Debt Service	348	426	331	364	396	4.5
Current	348	426	331	364	396	4.5
4. General Government and Others	1,111	1,203	1,310	1,411	1,509	8.0
Current	1,098	1,187	1,262	1,350	1,435	6.92
Capital	13	16	48	61	74	93.0
TOTAL EXPENDITURES	4,083	4,574	4,787	5,152	5,554	8.2
Current	3,472	3,811	3,932	4,194	4,452	6.4
Capital	611	763	855	958	1,102	16.0

[1] Source: Budget Commission

C. Projections of Local Government Fiscal Operations

The assumption most basic to the projections of local government expenditures during the Plan period is that their share in total expenditures will increase. This will be made possible by attaining the target growth rates set for receipts and expenditures at an annual average of 10.5 per cent and 6.0 per cent, respectively.

Of the increase in total revenue (national plus local) equal to ₱2,125 million from FY 1972-FY 1975, local governments will contribute 19.0 per cent. As can be observed in Table 6.7, surpluses will also be attained. The share of capital outlay to total capital expenditures (local plus national) will rise from 26.5 per cent in FY 1972 to 32.0 per cent in FY 1975. On the other hand, local government receipts will maintain its share to the total of 21.0 per cent.

Table 6.8 shows the distribution of local government expenditures on a functional basis. The largest items in the total are expenditures for general government and economic development. General government expenditures will increase from ₱487 million in FY 1971 to ₱735 million in FY 1975 while expenditures for economic development will grow from ₱188 million in FY 1971 to ₱283 million in FY 1975.

3. FINANCING PRIVATE INVESTMENTS

A. Private Investments

Private investment is expected to rise from a level of ₱6,029 million in FY 1970 to ₱7,917 million in FY 1975 at constant 1967 prices, representing an annual average growth rate of 5.0 per cent. Of the total gross domestic investment of ₱34,217 million planned for FY 1972-75, the share of the private sector constitutes ₱29,412 million or 86 per cent of the total.

The overall projected financing of private investment is as follows:

	FY 1972-75 (IN BILLION PESOS AT CONSTANT 1967 PRICES)
INVESTMENT REQUIREMENTS	34.24
FINANCING	
(1) Inflow from abroad	4.00
(2) Private Savings	30.24
(a) Government Financial Institutions (DBP, SSS GSIS)	2.75
(b) Private Commercial Banks (including PNB)	4.22
(c) Other Financial Intermediaries (Insurance companies, loan associations, etc.)	2.54
(d) Corporate Savings	5.10
(e) Non-institutionalized Personal Savings	15.33

Table 6.9 shows the contribution to private fixed capital formation broken down by sector by the three government financial institutions, namely: the DBP, SSS and GSIS.[2] In the case of the DBP, what is noteworthy is the emphasis to be given to the agricultural and industrial sectors, particularly for export-oriented production. More basic industrial production and manufacturing for exports shall be encouraged with industrial loans. Over FY 1972-75, the DBP's financing of private fixed capital formation is expected to range from between ₱1.59 and ₱1.77 billion.

[2] In current prices.

On the whole, the GSIS is expected to contribute a total of ₱690 million over the Plan period or some ₱163 million annually for the next two fiscal years, rising to ₱185 million in the last year of the Plan. Its involvement in private fixed capital formation is expected to be fully concentrated in housing. The private capital formation financing content of SSS operations will lie in its real estate commercial and industrial loans. On the average, ₱207 million will be available annually for these purposes.

Over the four years of the Plan, ₱340 million will be available for agricultural loans, ₱1,129.0 million to

TABLE 6.3—NATIONAL GOVERNMENT FISCAL OPERATIONS: SECTORAL-FUNCTIONAL CLASSIFICATION
(All funds combined, in million pesos, at current prices)

EXPENDITURE CLASSIFICATION	ESTIMATE [1] FY 1971	PROJECTED FY 1972	FY 1973	FY 1974	FY 1975
A. *Current Expenditures*					
1. Economic Development	605	699	755	794	832
Agriculture & Natural Resources	200	264	221	229	236
Transportation & Communication	243	252	311	326	341
Commerce annd Industry	54	62	69	71	73
Other Economic Development	108	121	154	168	182
2. Social Development	1421	1499	1584	1686	1789
Education	1122	1226	1288	1872	1455
Public Health	196	213	222	235	249
Labor and Welfare	103	60	74	79	85
3. Debt Service	348	426	331	364	396
4. General Government and others	1098	1187	1262	1350	1435
TOTAL CURRENT EXPENDITURES	3472	3811	3932	4194	4452
B. *Capital Expenditures*					
1. Economic Development	561	696	734	807	923
Agriculture & Natural Resources	106	142	135	162	185
Transportation & Communication	336	411	450	476	545
Commerce and Industry	15	32	24	40	46
Other Economic Development	104	111	125	129	147
2. Social Development	37	51	73	90	105
Education	25	35	54	62	72
Public Health and Medical Care	3	12	16	21	24
Labor and Welfare	9	4	3	7	9
3. General Government and others	13	16	48	61	74
Total Capital Expenditures	611	763	855	958	1102
TOTAL EXPENDITURES (A+B)	4083	4574	4787	5152	5554

[1] Source: Budget Commission

Table 6.4—FOUR-YEAR INFRASTRUCTURE PROGRAM
FY 1971/72 to FY 1974/75
ANNUAL INVESTMENT REQUIREMENTS[1]
(In million ₱/$ at current prices)

PROJECT CATEGORY	CURRENCY	FOUR-YEAR TOTAL	ANNUAL FUNDING REQUIREMENTS FY 1972	FY 1973	FY 1794	FY 1975
A. TRANSPORTATION	₱	2,035.76	440.80	461.69	551.90	581.37
	$	166.95	38.40	39.55	44.55	44.45
1. Highways	₱	1,604.10	340.80	365.80	447.50	450.00
	$	77.29	19.90	15.63	19.06	22.70
2. Airports	₱	126.80	24.00	22.80	30.00	50.00
	$	27.88	1.00	8.92	10.23	7.73
3. Air Navigation	₱	63.30	30.00	11.40	9.90	12.00
	$	12.72	4.50	4.98	3.24	—
4. Railroad	₱	116.56	13.10	34.59	34.50	34.37
	$	19.16	7.20	1.82	4.12	6.02
5. Portworks	₱	125.00	32.90	27.10	30.00	35.00
	$	29.90	5.80	8.20	7.90	8,00
B. COMMUNICATIONS	₱	107.50	16.50	26.00	30.00	35.00
	$	46.47	5.80	12.90	12.04	15.73
1. Telecom	₱	107.50	16.50	26.00	30.00	35.00
	$	46.47	5.80	12.90	12.04	15.73
C. WATER RESOURCES	₱	814.20	232.30	175.60	181.30	225.00
	$	118.15	11.04	24.70	37.00	44.51
1. Gravity Irrigation	₱	434.50	134.90	109.30	95.30	95.00
	$	44.58	11.14	10.10	8.50	14.84
2. Pump Irrigation	₱	18.40	5.50	4.40	4.50	4.00
	$	20.10	—	6.00	5.50	8.60
3. Water Supply and Sewerage	₱	361.30	91.90	61.90	81.50	126.00
	$	53.47	.80	8.60	23.00	21.07
D. POWER ELECTRIFICATION	₱	455.70	86.50	98.94	152.01	118.25
	$	129.42	32.20	24.62	41.76	30.84
1. Power Plants & Transmission Lines	₱	363.74	68.54	79.94	127.01	88.25
	$	96.02	3.80	24.62	36.76	30.84
2. Rural Electrification	₱	92.00	18.00	19.00	25.00	30.00
	$	33.40	28.40	—	5.00	—
E. SOCIAL INFRASTRUCTURE	₱	444.90	103.70	96.90	116.90	127.40
	$	25.29	5.20	5.41	7.42	7.26
1. Bldgs. Hospitals	₱	57.50	15.50	12.00	15.00	15.00
	$	—	—	—	—	—
2. Pre-fab Schools	₱	173.40	47.60	27.90	38.70	49.20
	$	21.39	5.20	5.41	5.52	5.26
3. River control	₱	69.00	16.60	15.00	18.20	19.20
	$	3.90	—	—	1.90	2.00
4. Shore Protection	₱	15.00	4.00	2.00	5.00	4.00
	$	—	—	—	—	—
5. Misc. Pub. Works	₱	130.00	20.00	30.00	40.00	40.00
F. PRELIMINARY ENGINEERING	₱	57.40	15.40	12.00	15.00	15.00
	$	12.70	2.70	3.00	3.50	3.50
TOTAL	₱	3,915.46	895.20	871.13	1,047.11	1,102.02
	$	498.98	96.24	110.18	146.27	146.29

[1] Only peso requirements are included in the budget of the National Government. The Program includes the capital expenditures of major government corporations.

Figure 6.1

REVISED FOUR-YEAR PUBLIC INVESTMENT PROGRAM
FY 1972-75
(In million ₱/$ at current prices)

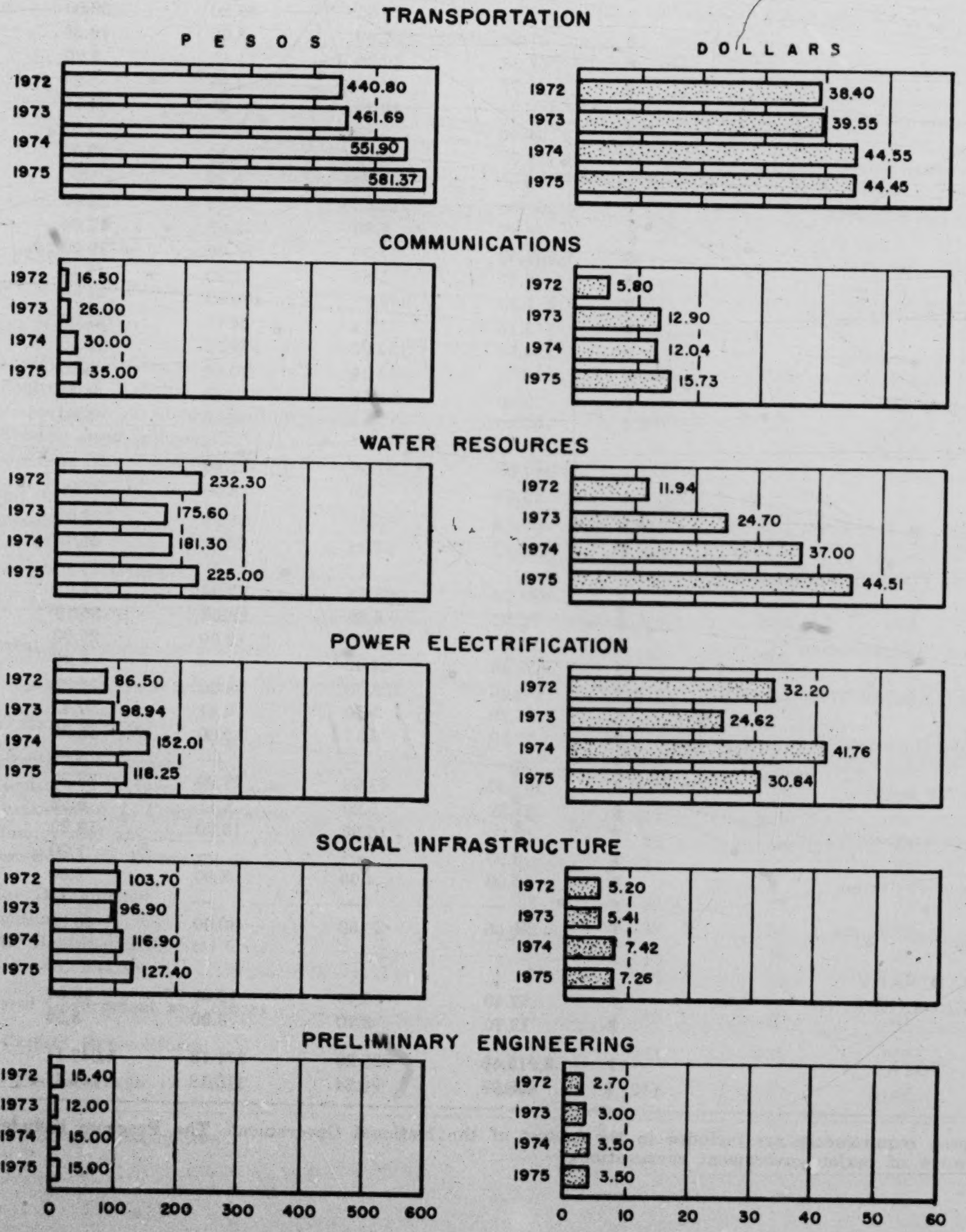


Table 6.5—FOUR-YEAR INFRASTRUCTURE PROGRAM, FY 1972-75
ANNUAL INVESTMENT REQUIREMENTS
(In million ₱/$ at current prices)

SOURCES OF FUNDS	FY 1972	FY 1973	FY 1974	FY 1975	FOUR-YEAR TOTAL
A. DOMESTIC SOURCES (₱)	₱ 895.20	871.13	1,047.11	1,102.02	3,915.46
1. General Revenue (GR)	390.60	378.89	478.20	574.77	1,822.46
2. PW & ED Bonds (GOB)	—	40.00	40.00	60.00	140.00
3. Special Funds/Earnings	174.80	197.20	244.50	257.00	873.50
4. Corporate Bonds	174.20	129.84	187.91	210.25	702.20
5. Export Tax	155.60	125.20	96.50	—	377.30
B. FOREIGN SOURCES ($)	$ 96.24	110.18	146.27	146.29	498.98
1. Loans/Grants	45.32	82.84	114.42	120.70	363.28
2. Reparations	50.92	27.34	31.85	25.59	135.70
GRAND TOTAL	₱ 895.20	871.13	1,047.11	1,102.02	3,915.46
	$ 96.24	110.18	146.27	146.29	498.98

Table 6.6—INFRASTRUCTURE INVESTMENT REQUIREMENTS BY SOURCE OF FINANCING AND PROJECT CATEGORY, FY 1972-75
(In millions)

PROJECT CATEGORY	DOMESTIC FUND SOURCES (₱)						FOREIGN SOURCES ($)		
	GR	GOB	SPL FDS	CORP. BONDS	EXPORT TAX	TOTAL	LOANS	REPARATIONS	TOTAL
1. Highways	847.60	—	550.70	—	205.80	1,604.10	62.89	14.40	77.29
2. Airports	92.50	27.00	7.30	—	—	126.80	24.13	3.75	27.88
3. Air Nav. Facilities	63.30	—	—	—	—	63.30	10.72	2.00	12.72
4. Portworks	—	—	110.80	—	14.20	125.00	29.90	—	29.90
5. Railroads	101.56	10.00	5.00	—	—	116.56	—	19.16	19.16
6. Telecom	27.50	53.00	27.00	—	—	107.50	29.35	17.12	46.47
7. Irrigation	125.00	30.00	0.90	139.56	157.30	452.86	50.54	14.10	64.64
8. Waterworks	16.70	—	87.70	256.90	—	361.30	49.45	4.02	53.47
9. Power	—	—	58.00	305.74	—	363.74	88.40	7.66	96.06
10. Rural Electrification	45.90	20.00	26.10	—	—	92.00	—	33.40	33.40
11. Schools	173.40	—	—	—	—	173.40	1.30	20.09	21.39
12. Flood Control	69.00	—	—	—	—	69.00	3.90	—	3.90
13. Shore Protection	15.00	—	—	—	—	15.00	—	—	—
14. Bldgs./Hospitals	57.50	—	—	—	—	57.50	—	—	—
15. Misc. Public Works	130.00	—	—	—	—	130.00	—	—	—
16. Prel. Engineering	57.40	—	—	—	—	57.40	12.70	—	12.70
TOTAL	1,822.46	140.00	873.50	702.20	377.30	3,915.46	363.28	135.70	498.98

Figure 6.2

REVISED FOUR-YEAR INFRASTRUCTURE PROGRAM
FY 1972-75 BY SOURCES
ANNUAL INVESTMENT REQUIREMENTS
(In million P/$ at current prices)

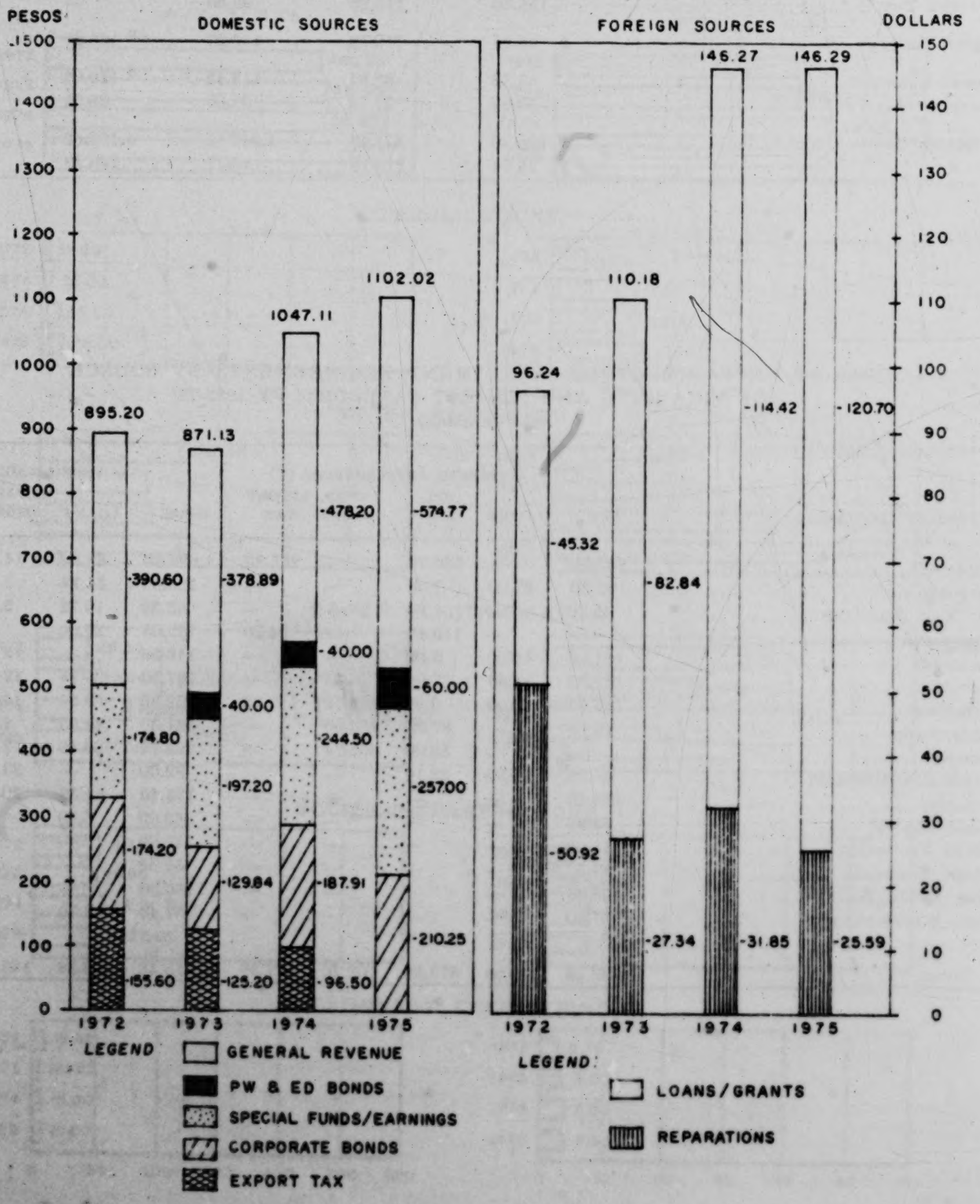


Table 6.7—LOCAL GOVERNMENT FISCAL OPERATIONS, ECONOMIC CLASSIFICATION
(In million pesos, at current prices)

	ESTIMATE FY 1971	PROJECTED FY 1972	FY 1973	FY 1974	FY 1975	AVERAGE FY 72-FY 75
A. CURRENT OUTLAY						
1. Current expenditure on goods and and services	745	787	832	879	927	6.0
2. Current transfers	36	39	43	48	53	
3. Debt interest	9	10	11	12	15	
TOTAL CURRENT OUTLAY	789	836	886	939	995	6.0
B. RECEIPTS						
1. Revenue from taxation	705	782	862	954	1055	10.6
2. Incidental revenue	71	78	87	96	106	
3. Receipts from Public Utilities	89	99	109	121	133	
4. Other Receipts	172	191	211	233	258	
TOTAL RECEIPTS	1038	1150	1269	1404	1552	10.5
Less: Total Current Outlay	789	836	886	939	995	6.0
C. CURRENT SURPLUS	249	314	383	465	557	22.0
D. CAPITAL OUTLAY						
1. Gross Capital Formation	168	215	269	332	403	
2. Capital Transfers & Direct Lending	46	60	76	93	114	
TOTAL CAPITAL OUTLAY	214	275	345	425	517	24.6
Less: Current Surplus	249	314	383	465	557	22.0
E. GROSS FINANCIAL GAP (D—C)	(35)	(39)	(38)	(40)	(41)	
F. TOTAL EXPENDITURES	1003	1111	1231	1364	1512	11.0

Table 6.8—LOCAL GOVERNMENT FISCAL OPERATIONS FUNCTIONAL CLASSIFICATION
(In million pesos, at current prices)

	ESTIMATE FY 1971	PROJECTED FY 1972	FY 1973	FY 1974	FY 1975
1. General Government	487	540	598	663	735
2. Social Development	134	148	164	182	202
3. Economic Development	188	208	230	255	283
4. Protective Services	176	194	215	239	265
5. Debt Service	19	21	23	25	28
TOTAL EXPENDITURES	1,003	1,111	1,231	1,364	1,512

₱1,308.8 million for industrial, ₱1,609.4 million for real estate, and ₱54.0 million for other loans. This means that a total of ₱3,132.4 million to ₱3,312.4 million will be available for private fixed capital formation from FY 1972-75.

4. EXTERNAL FINANCE AND ASSISTANCE

The effort to use long-term capital flows into the country will be made through the Consultative Group for the Philippines. The economy requires an average of U.S. $400 to $500 million per year of capital inflows which must be obtained from official development assistance.[3] The capital inflows necessary are stated in the chapter on the balance of payments (see Chapter 4).

[3] As defined by the Development Assistance Committee of the OECD, these are capital flows which meet two tests: (1) they are administered for the purpose of economic development and welfare; (2) they are concessional in character, that is, their terms are sigificantly softer than normal commercial terms.

Table 6.9—GSIS, DBP, SSS CONTRIBUTIONS TO PRIVATE FIXED CAPITAL FORMATION, BY SECTOR

(In million pesos at current prices)

	FY 1971-72				FY 1972-73				FY 1973-74				FY 1974-75				FY 1972-75			
	DBP	GSIS	SSS	TOTAL	DBP	GSIS	SSS	TOTAL	DBP	GSIS	SSS	TOTAL	DBP	GSIS	SSS	TOTAL	DBP	GSIS	SSS	TOTAL
1) Agriculture	40.0	—	—	40.0	80.0	—	—	80.0	100.0	—	—	100.0	120.0	—	—	120.0	340.0	—	—	340.0
2) Industrial (min.) ..	217.7	—	—	217.7	279.6	—	—	279.6	291.5	—	—	291.5	340.2	—	—	340.2	1129.0	—	—	1129.0
(max.) .	254.7	—	—	254.7	324.7	—	—	324.7	355.3	—	—	355.3	374.1	—	—	374.1	1308.8	—	—	1308.8
3) Real Estate	—	—	—	373.3	—	—	—	383.4	—	—	—	408.6	—	—	—	444.1	—	—	—	1609.4
Housing	10.0	162.5	77.4	249.9	20.0	163.0	10.5	193.5	26.0	178.5	166.2	364.7	20.0	185.0	230.1	435.1	70.0	689.0	484.2	1243.2
Dev. projects* ..	—	—	118.0	118.0	—	—	186.9	186.9	—	—	40.9	40.9	—	6.0	—	6.0	—	6.0	345.8	351.8
Hospital loans .	—	—	5.4	5.4	—	—	3.0	3.0	—	—	3.0	3.0	—	—	3.0	3.0	—	—	14.4	14.4
4) Other loans**	13.0	—	—	13.0	15.0	—	—	15.0	13.0	—	—	13.0	13.0	—	—	13.0	54.0	—	—	54.0
Totals min.	280.7	162.5	200.8	644.0	394.6	163.0	200.4	758.0	424.5	178.5	210.1	813.1	493.2	191.0	233.1	917.3	1593.0	695.0	844.4	3132.4
max.	317.7	162.5	200.8	681.0	439.7	163.0	200.4	803.1	488.3	178.5	210.1	876.9	527.1	191.0	233.1	451.2	1772.8	695.0	844.4	3312.2

* Loans to local gov'ts; private development bank rediscounts; others.

** SSS New Town; GSIS construction projects.

To relieve the country of its unfavorable external debt profile, a large proportion of the capital inflows is expected to be in the form of official development assistance, although the World Bank expects the external debt situation to remain at a relatively high level. A target rate of official development assistance of 35 to 40 per cent of total capital inflows appears to be achievable within the coordinating facility of the Consultative Group. The rest will have to be in the form of assistance from the export-import bank of the United States and of Japan and from bilaterally obtained suppliers credit.

The target borrowings from the World Bank and the Asian Development Bank have been estimated at about $50 million and $25 million on an annual basis. These are achievable figures, considering that up to mid-1970, the country's relative access to loans of these types has not been as high as those obtained by some other countries in the Asian region, especially on a per capita basis. Work is in process towards defining the spheres of interest of these two major development banks. In the area of the electric power sector, there is a clearcut regional division of labor between them in respect of their activity. The development of power in Mindanao will henceforth be a lending sphere of the Asian Bank, and Luzon's electrification will be that of the World Bank. Such division of lending areas allows a clear distinction between regional programs in such important infrastructure as power.

Bilateral assistance will be concentrated in the area of commodities, especially those which are needed by industries. Quick disbursing concessional loans such as those obtained from the United States from P.L. 480 (which allows importations of cotton and tobacco) enables the country to use proceeds from the commodities for development projects before the loan is paid in the future. Such quickly disbursing concessionary loans will enable the country to generate peso proceeds in view of the scarcity of tax money to finance all development projects — counterpart funds for projects that are financed by foreign loans. Commodity loans of these types are being sought from several other countries like Japan, West Germany, Denmark, Belgium, Australia, and Canada, among others, to provide additional resources for development projects. All in all, the target assistance, together with the terms of such assistance are summarized in Table 6.10.

Table 6.10—TARGET OFFICIAL DEVELOPMENT ASSISTANCE ON DISBURSEMENT BASIS[1] FOR FISCAL YEAR 1971-72

SOURCES	DISBURSED AMOUNT ($ MILLION)	MATURITY PERIOD	APPROVED COMMITMENTS AS OF MAY 31, 1971
A. INTERNATIONAL ORGANIZATIONS	84		
1. World Bank (project loans)	55	19 years, with 4-year grace-26 years, with 6-year grace	104
2. Asian Dev. Bank (project loans)	25	25 years, with 5-year grace	85
3. UNDP	4[2]	Grant basis	19
4. Other UN (WHO, UNICEF, WFP)	8.5		—
B. BILATERAL SOURCES	130		
1. U.S. Government	55		31
a. Commodity loan (P.L. 480)	20	20 years, with 5-year grace	20[3]
b. Development loan (projects)	10[4]	40 years	20
c. Technical assistance (projects)	10	Grant basis	—
d. Others (surplus property disposal)	10	Grant basis	—
e. Family planning	5		—
2. Other Governments	75		
a. Japan[5]	65		11
b. Others	10		

[1] Disbursements arise from approved commitments. In the case of project loans, disbursements against commitments generally take more than one year, the rate of disbursements depending on the speed in which the projects are constructed. In the case of commodity loans, disbursements are generally rapid, within one year after the commitments are made.
[2] Part of the country program.
[3] Commitment as approved on April 1971. An additional $55 million has been preliminarily committed by the U.S. Government for FY 1971-72.
[4] Estimated disbursements out of $20 million that has been preliminarily committed.
[5] Commitment of $65 million is under advanced consideration by the Japanese government. (Project loan shall account for $25 million.)

Bilateral and multilateral assistance is also being planned to help lengthen the pipeline of bankable development projects. This short pipeline has been cited as one of the reasons for the inability of the country to secure more development loans. Some assistance from the U.S. Agency for International Development (AID) and from the United Nations Development Program have recently been in the form of pre-investment and feasibility studies. The end objective of such assistance is normally to secure loans. Studies of roads, ports, irrigation, sewerage and water resource systems have been conducted in the past, and quite a few are being made for this purpose.

A. U.S. Assistance

The official development assistance given by the U.S. government has diminished over the 1950's and the 1960's. However, it continues to be the most important source of development assistance given by any country and exceeds in volume the amount of assistance received from the UN Development Program.

Recently, a greater volume of assistance has resulted as a consequence of stepped up interest in the rural electrification project and the population planning program. Official U.S. development assistance in the years of this Plan will be about three times the annual average of the assistance during the mid-1960's.

The breakdown of U.S. assistance for the years 1969-1971 is given in Table 6.11.

B. UN Development Program

One important aspect of the UN Development Program after 1971 is the adoption of "country programming", or the programming of UNDP assistance at

Table 6.11—THREE-YEAR SUMMARY OF U.S. AID PROJECTS
(In thousand U.S. dollars)

U.S. AID PROGRAM PROJECTS	1969	1970	1971	TOTAL
Provincial Development	416	461	625	1,502
Agricultural Services	600	1,049	800	2,449
Water Resources Development	108	24	150	282
Equipment Pool Improvement	200	77	175	452
Malaria Eradication	1,262	500	450	2,212
Nutrition Support	112	—	—	112
Population Planning	1,348	4,948	4,500	10,796
Urban Planning	60	61	75	196
Internal Security	700	825	1,000	2,525
Tax Collection Improvement	200	—	—	200
Public Personnel Administration	53	—	—	53
Fiscal and Financial Coordination	69	21	—	90
Customs Administration Improvement	40	—	—	40
General Participant Training	70	74	75	219
Technical Support	945	978	850	2,773
Special Development Authority	45	28	50	123
ALEC	73	25	70	168
General Technical Adv. Services	155	—	100	255
Loans-Rural Elect.-Cooperative	3,100	—	—	3,100
TOTAL	9,556	9,071	8,920	27,547
IN MILLION DOLLARS	**1969**	**1970**	**1971**	**TOTAL**
PL 480				
Title I		10.00	20.00	30.00
Title II	12.28	16.49	6.70	35.47
TOTAL	12.28	26.49	26.70	65.47
U.S. AID Development Loan (Rural Electrification)			20.00*	20.00

* Anticipated

the country level which involves the identification in advance, for a period of three to five years, of the use of UNDP inputs in relation to the country's development objectives. This will give the planning authorities the leverage to choose projects that support national development priorities.

The Philippine country program proposal is essentially a rolling five-year program for UNDP assistance amounting to $20 million. Programming of assistance includes committed projects as well as new projects to be approved.

The country program is a large document and deserves separate treatment. Therefore, insofar as it reflects the inputs of the UN Development Program to the national development plan, the UNDP country program for the Philippines serves as an annex document.

Since the inception in the Philippines of the UNDP and the World Food Program, total assistance received and/or approved up to the end of year 1971 amounted to $25.84 million. This is summarized in Table 6.12. Summaries of both the on-going and proposed projects by sector for UNDP assistance under the Philippine Country Program Proposal for 1972-1976 are also given in the same table. UNDP commitment for on-going projects amounts to $6.94 million and proposed projects call for $10.54 million. Estimated Philippine counterpart support for the program is placed at $150.69 million. A reserve of $2.52 million has been established to meet future requirements of listed projects and to allow the inclusion of selected new project proposals.

C. Development Uses of the Japanese Reparations

The reparations constitute a large volume of external resources that can be used effectively for development. The country is currently on the 15th year reparations schedule, leaving just another five years before the total reparations from Japan of $550 million are fully utilized. At this time, about a little over $100 million of reparations have not yet been allocated. The Development Plan intends to harness reparations especially in the public sector, to assist in the program of infrastructure construction.

The law on the utilization of reparations funds allows the private sector to avail of reparations goods. The experience with respect to private sector uses of reparations has not been a very good one. For one thing, a portion of reparations goods has been obtained to supply consumers goods for limited groups of war veterans. Moreover, a great amount of private reparations which has been used as industrial equipment has not been fully paid as required by law. In fact, arrears have increased over time, with the end result that most end-users have tended to benefit directly and exclusively from reparations.

Such an experience about the private uses of reparations emphasizes the need to maximize for public uses the remaining portion of the allocations. Accordingly, the Government has decided to concentrate the use of reparations funds on the public sector.

Table 3.12—UNDP PROGRAM

A. *UNDP and WFP assistance up to* 1971

1. Summary of Assistance:

	COMMITMENT ($000)	PHIL. GOV'T. SUPPORT (P000)
UNDP/SF	15,812.89	46,346.53
UNDP/TA	763.45	1,100.00 [1]
World Food Program	9,270.40	49,583.04
TOTAL	25,846.74 [2]	97,029.57

B. *Country Program Proposal for UNDP Assistance*, 1972-1976

I. On-going Projects by Sector:

SECTOR	NO. OF PROJECTS	UNDP INPUT ($000)	GOV'T SUPPORT (P000)
Agriculture, Forestry & Fisheries	9	2,721.5	11,384.6
Minerals	3	68.5	61.6
Industry	2	1,400.5	4,704.0
International Trade	1	549.3	3,493.9
Education & Manpower Development	7	208.8	898.5
Science and Technology	1	388.6	42.0
Health and Welfare	3	43.5	69.6
General and Regional Development	1	157.6	2,908.3
Transport and Communications	4	1,386.0	4,215.6
Water Supply	1	17.5	28.0
TOTAL	32	6,941.8	27,806.1

II. Proposed Activities by Sector:

Agriculture, Forestry & Fisheries	10	2,997.0	44,497.2
Minerals	1	27.0	19.2
Industry	2	370.0	1,043.0
Education & Manpower Development	8	1,605.7	57,908.0
Science and Technology	4	907.5	4,387.6
Health and Welfare	6	477.2	1,153.2
General and Regional Development	5	1,342.6	6,653.1
Transport and Communications	6	2,065.0	5,862.7
Power	1	100.0	500.0
Water Supply	2	645.0	867.0
TOTAL	45	10,537.0	122,891.0

III. Summary:

On-going activities	32	6,941.8	27,806.1
Proposed activities	45	10,537.0	122,891.0
Reserve	—	2,521.2	—
TOTAL	77	20,000.0	150,697.1

[1] Direct support to the UNDP. Does not include support coming from government agencies requesting for the assistance.

[2] Excludes the regular program of the U.N. Specialized Agencies, the money value of which cannot be obtained in the Philippines.

PART III

Sectoral Development

CHAPTER 7
Agriculture

The technological breakthrough in rice production has set the stage for the further revolutionizing of the structural pattern of agricultural development. The present Four-Year Plan is designed both to sustain the producivity gains achieved in rice as well as to maintain the momentum of development by expanding into other areas of agricultural production. In this effort, the program approach is to capitalize on technological innovations available in key agricultural areas, on the increased receptiveness of farmers to change, and on the existing coordinated government machinery and extensive field organization that played a key role in the rice production campaign. With these resources and with the concentration of financial and other incentives in carefully-selected priority undertakings, the revitalized program is expected to generate an accelerated growth both in agriculture and other sectors of economic activities.

In recent years, the overall performance of the agricultural sector has been generally impressive. In FY 1968, agricultural output markedly increased by 11.2 per cent over the previous year's production level. In the following year, however, due to prolonged drought and typhoons, the growth rate decelerated considerably to less than 1 per cent. As weather conditions turned favorable, with the intensified coordinated multi-agency efforts, agricultural production came back with a growth rate of 3.0 per cent in FY 1970. In absolute value, the FY 1970 gross value added from this sector amounted to ₱8,662 million (about 33 per cent of net domestic product) valued at 1967 prices. During the first half of FY 1971, the country was again hit by a rash of strong typhoons that caused heavy damage to agricultural production. In palay output alone, the damage was estimated at 426 thousand tons. In aggregate value, the major natural calamities destroyed some ₱600 million worth of agricultural crops and facilities. With the extensive typhoon-recovery program implemented in the second half of that fiscal year, the growth of agricultural output nevertheless still increased by 4.6 per cent over FY 1970's performance.

It is apparent that a general process of transformation from a basically traditional state to a modernized agricultural sector is going on in the Philippines. The present and potential successes in some agricultural enterprises brought about mainly by improved technological changes including improvement in human resources and institutions are now being generalized into other development programs in this sector. The gains in agricultural productivity are anticipated to continue in the present plan of expansion for both vertical and horizontal integration of activities particularly in agrindustry which has direct backward and forward linkages with agriculture.

1. AGRICULTURAL GOALS AND THE STRATEGY OF DEVELOPMENT

A. Objectives

The program aims to attain the following general objectives within the next four years:

(1) Expansion of Food Production — One of the major objectives of the program is to continue the spread of the improved high-yielding varieties of rice throughout gradually expanding irrigated areas in order to keep the Philippines at least continuously self-sufficient in this cereal. With self-sufficiency in cereals, the program also envisions to achieve self-sufficiency in meat, in the corollary production of feedgrains, in fish, and in fruits and vegetables. The goal is to increase production of these items, firstly, to satisfy effective demand, thus reducing imports and conserving foreign exchange, and, secondly, to satisfy the higher level of nutritional requirements.

(2) Expansion of Agricultural Exports — Two twin objectives here are: (a) to remove the bottlenecks to expansion in output of the traditional commercial crops (sugar, coconut, abaca and cigar tobacco) and (b) to develop export markets for non-traditional exports such as poultry and breeding hogs, mango and other selected vegetables and fruits, all within the program period.

(3) Intensified Land Distribution — The objective is to facilitate land ownership as an incentive for increased productivity and as a means of minimizing the social unrest in some segments of the society. Through a land-use classification scheme, releases of more land for agriculture and other productive uses can be facilitated. Expanded land surveys and patent issuances will speed up the distribution of public lands to occu-

pants and landless farmers.

(4) Conservation of Natural Resources — The aim is to maximize the effective utilization of natural resources in order to (a) provide additional revenues to accelerate domestic capital formation and (b) maintain the ecological balances essential in the proper conservation of natural resources for future generations.

B. Strategy

The program strategy to achieve these objectives is based on the following:

(1) In the agricultural production and marketing program, special attention will be given to the areas of production, processing, marketing and finance and other parts of the total business systems as well as to backward and forward linkages of agriculture with other industries. The following measures are designed to generate added momentum towards the attainment of goals in these areas:

(a) Capitalize on the receptiveness of the farmer to change, brought about by the initial success of the rice program and its consequent rewards to those who adopted the new technology.

(b) Primary dependence will be placed on private, rather than on public, initiative. The government's role will continue to be on the promotion, support and financing of activities in a few, well-defined priority areas.

(c) New emphasis will be placed on a total agrindustry concept.

(2) The strategy places great stress on the social justice aspects of agricultural development. Towards this end, the government will exert special efforts to facilitate land distribution and to achieve coordinated action in land-reform areas, especially in those activities designed to increase productivity and reduce social unrest. The program will also lay emphasis on efforts to increase rural employment and maintain equitable and stable agricultural prices.

(3) As part of the implementation phase, the government shall continue to follow and exploit further the advantages of the principle of concentrating its resources on only a few vital areas at a time, instead of ineffectively dispersing manpower and government money over too broad an area. Full use will be made of the proven coordinated government approach in the implementation of programs. This means that optimum use of government personnel and budgets will be achieved by redeployment of these resources into the high-priority programs and by coordination of government financial institutions so as to give lending emphasis to these main areas within the next four years. This also means that each major program concerned will limit itself to a few geographical areas, chosen for their appropriateness and potential, depending on the program, rather than spread out thinly over the entire country.

2. OUTPUT TARGETS

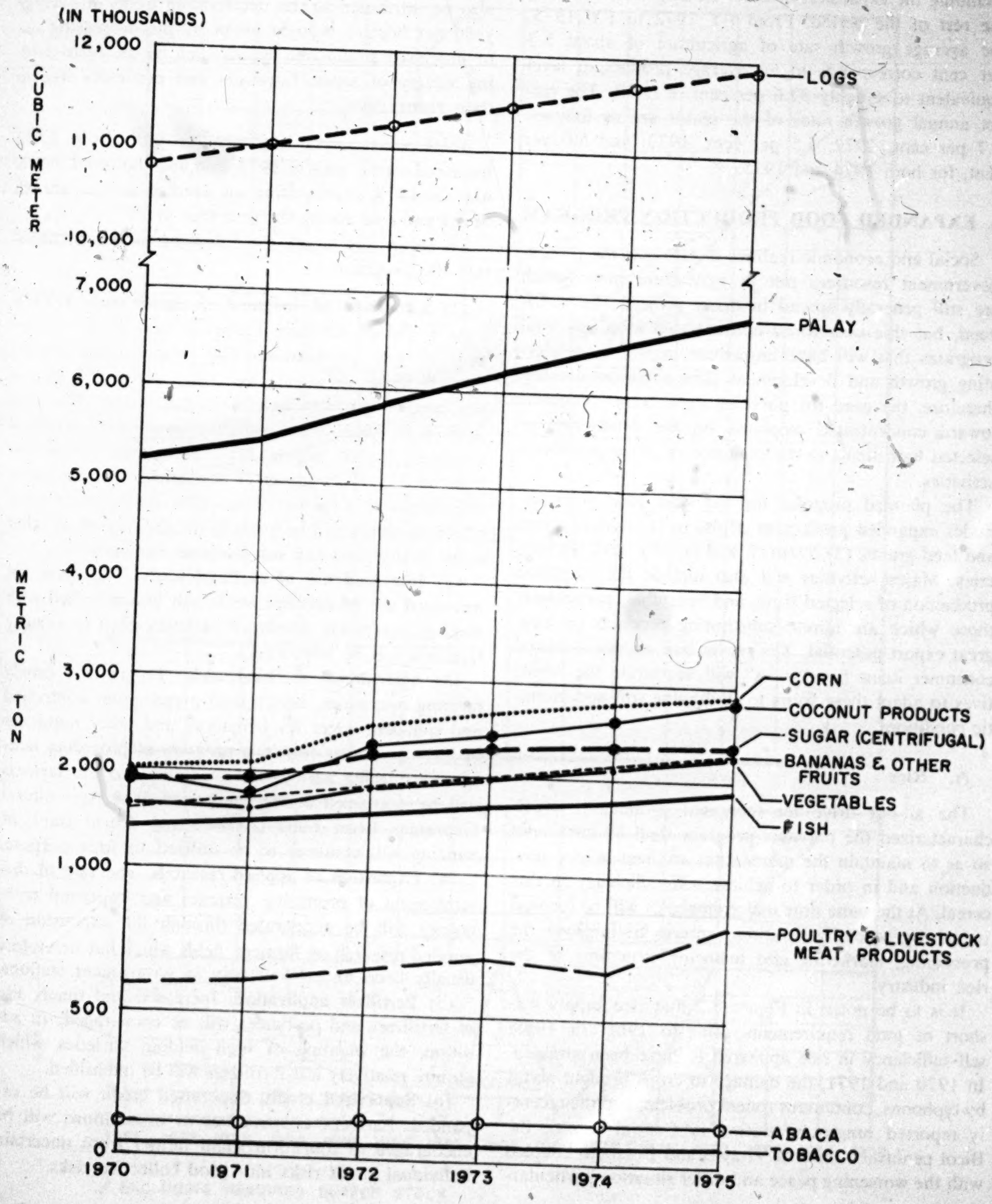
The production of food crops, commercial crops including forest products, and the intensified drive on land distribution and conservation of natural resources constitute the main targets of the porgram. In terms of physical units, the following are the planned average rates of growth in agricultural production during the period:

	(IN PER CENT)
Food Crops:	
First priority	
Palay	6.1
White Corn	5.8
Second priority	
Vegetables	6.5
Fruits	6.6
Feed Grain:	
Yellow corn	8.2
Sorghum	70.0
Soybean	100.0
Fish	5.8
Livestock & Poultry Products:	
Poultry	8.2
Pork	8.0
Carabeef	6.9
Beef	6.0
Eggs	7.3
Commercial crops:	
Coconut, copra	4.5
Coconut, oil	15.0
Coconut, desiccated & others	15.0
Centrifugal Sugar	3.8
Abaca, raw fibers	2.7
Abaca, cordage	3.1
Tobacco, cigar leaf	9.7
Forestry (logs)	2.0

With an intensified application of advanced technology in agriculture and a more effective administration of development projects in the rural areas, the agricultural sector is expected to rapidly expand from a lower production base (due to typhoon damage in

Figure 7.1

PHYSICAL TARGETS OF AGRICULTURAL PRODUCTION
FY 1972-75



FY 1971) to the first year of the program. From this peak, total agricultural production is then set at a phase to sustain sufficiently the needs of the economy including the expansion of other leading sectors during the rest of the period. From FY 1972 to FY 1975, the average growth rate of agriculture of about 5.3 per cent corresponds to an average production level equivalent to roughly 32.6 per cent of NDP. The target annual growth rates of the sector are as follows: 5.7 per cent, 1972; 5.5 per cent, 1973; and 5.0 per cent, for both 1974 and 1975.

3. EXPANDED FOOD PRODUCTION PROGRAM

Social and economic realities dictate that the present government resources put in agriculture now, which are still generally spread in many projects, be continued, but this time to be concentrated in a few vital programs that will have immediate impact in accelerating growth and development. The situation stresses, therefore, the need for pursuing agricultural programs toward concentrated emphasis on the production of selected food items to the exclusion of more peripheral activities.

The planned program for the next four years includes expanded production efforts in (1) rice, (2) corn and feed grains, (3) livestock and poultry, and (4) fisheries. Major activities will also include the increased production of selected fruits and vegetable, particularly those which are import-substituting products or have great export potential. The recent ban on non-essential consumer items like "fruits" will accelerate the incentives to adapt these fruits to Philippine soil and climatic conditions.

A. Rice

The all-out drive for increased production which characterized the previous program shall be continued so as to maintain the momentum attained in rice production and in order to achieve self-sufficiency in this cereal. At the same time major emphasis will be focused in solving second-generation ventures to improve the processing, marketing and financing structures of the rice industry.

It is to be noted in Figure 7.2 that rice supply was short of total requirements prior to 1968. In 1968, self-sufficiency in rice appeared to have been attained. In 1970 and 1971, the damage to crops brought about by typhoons, continuous rodent problem, and the recently reported tungro infestation in Central Luzon, the Bicol peninsula, Eastern Visayas and Cotabato coupled with the worsening peace and order situation particularly in the rice granary areas of Mindanao have resulted in a low aggregate rice output for these years. The imminent rice shortage for which importation of about 420,000 metric tons has to be resorted to in 1971 may also be attributed to the decelerating trend in average yield per hectare brought about by the decreasing use of improved production inputs such as the high-yielding variety of seeds, fertilizers and pesticides due to their rising costs.

Total palay output is planned to grow from 5,853 thousand metric tons in 1972 to 6,982 thousand metric tons in 1975, representing an average annual growth of 6.1 per cent during the next four years.

To attain this target, the following elements constitute the program:

(1) **Saturation of irrigated ricelands with HYV's.** This is one of the main factors critical to the expansion of rice production. The non-seasonal HYV's (high-yielding varieties), averaging about 70 cavans per hectare, perform best in irrigated land. The program is to plant these varieties on existing irrigated ricelands of 1.2 million hectares as well as on the planned 315,000 hectares of new area to be put under irrigation within the next four years. At the same time, major emphasis will be given to the production of other crops in marginal and sub-marginal ricelands.

(2) **Increased use of certified seeds.** The drive for increased use of certified seeds will be intensified with emphasis on newly developed varieties. Seed processing facilities will be improved.

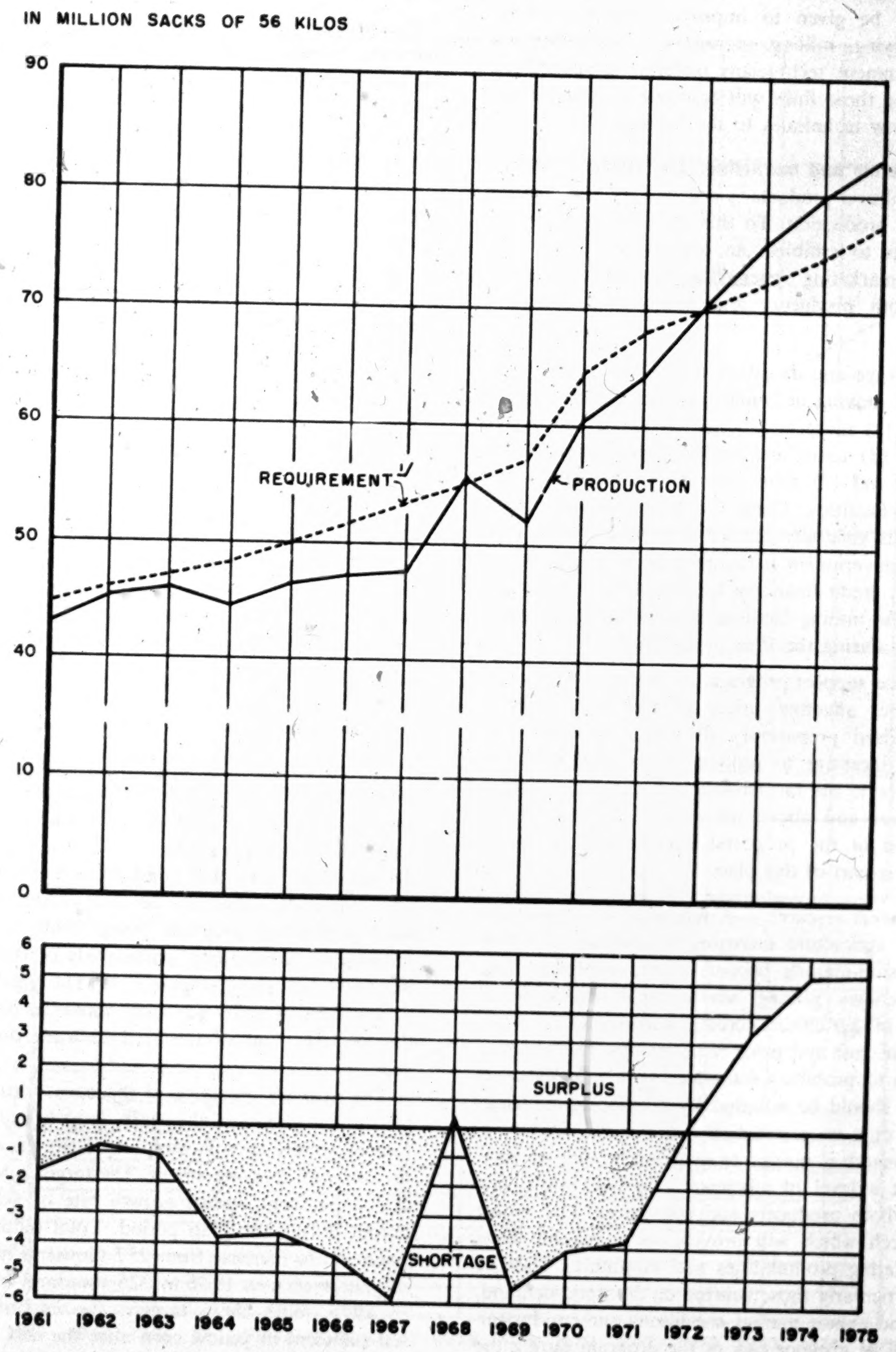
(3) **Agricultural mechanization.** To provide timely farming operations, better land preparation, controlled and sufficient water for irrigation, and other requisites of increased farm output, a program of providing non-labor-displacing agricultural machinery to the farmers will be intensified during the period. The Agricultural Guarantee Loan Fund (AGLF) and World Bank financing will continue to be utilized for this purpose.

(4) **Expansion of applied research.** The rate of dissemination of promising varieties and improved technology will be accelerated through the expansion of applied research on farmers' fields which has heretofore usually been undertaken only in government stations.

(5) **Fertilizer application.** Increased and timely use of fertilizers and pesticides will be encouraged. In addition, the planting of high-yielding varieties which require relatively less fertilizers will be intensified.

(6) **Supervised credit.** Supervised credit will be expanded. Farmers' cooperatives or associations will be encouraged to transform small farmer from uncertain individual credit risks into good collective risks.

Figure 7.2
THE RICE SITUATION



1/ EXCLUDING REQUIRED BUFFER STOCK

(7) **Training of technicians.** Primary emphasis for training will be given to improving the harvesting, threshing, drying, milling, storage and marketing aspects. Government technicians undergoing specialized training along these lines will continue to disseminate widely the new techniques to the farmers.

(8) **Processing and marketing.** The efficient marketing of agricultural products is a necessary complement to increased production. To this end, the program includes efforts to establish an orderly and systematic agricultural marketing system that will advance the interest of both producers and consumers. This will involve:

(a) Storage and distribution facilities.—More and more rice moving in commercial trade increases the need for (1) more and better threshing and drying facilities, (2) more and better storage and milling facilities, and (3) more farm-to-market roads and transport facilities. These are the areas where improvements generally require large amounts of capital. The government is taking steps to help mobilize additional credit financing for the renovation of old storage and milling facilities and the construction of new ones during the Plan period.

(b) Price support program.—Government marketing policies affecting prices of rice are currently being revised preparatory to major changes. The principal incentive to produce more rice, which is a fair price to the farmer that will give an adequate return over and above his cost of production (as considered in the proposed agenda for policy reforms) is a part of this plan.

(c) Market research.—A felt need for more facts arises as agriculture increases in commercialization and decision-making becomes more complex. This need becomes glaring when rapid technological changes in agriculture create corresponding rapid changes in cost and price relationships. The systems-approach to problems associated with priority commodities should be adopted by developing information not only on production but also on marketing. More research is needed to evolve a scheme of marketing at a level of efficiency that will insure fair price to both producers and consumers. The aspect of research which will provide more reliable facts on marketing profitabilities and continuing feasibilities, particularly those bearing on domestic demand, prices and export market conditions and production data, will be a major task of the program during the next four years.

B. White Corn

The primary use of white corn is for human consumption, being a staple food of about 20 per cent of the total population. It is extensively used as food in the Visayas, Mindanao and Bicol Regions. In addition to its being a primary source of food, white corn is also extensively used in the manufacture of corn starch and other by-products such as corn oil, corn syrup, glucose, corn flakes, gluten and corn meal.

The white corn production program aims to provide for the growing requirement for human consumption as well as for the aforementioned industrial uses of corn. The planned outputs of white corn during the program period is expected to grow from 2,035 thousand metric tons in 1972 to 2,411 thousand metric tons in 1975, representing an average annual growth of 5.8 per cent.

C. Feed Grains

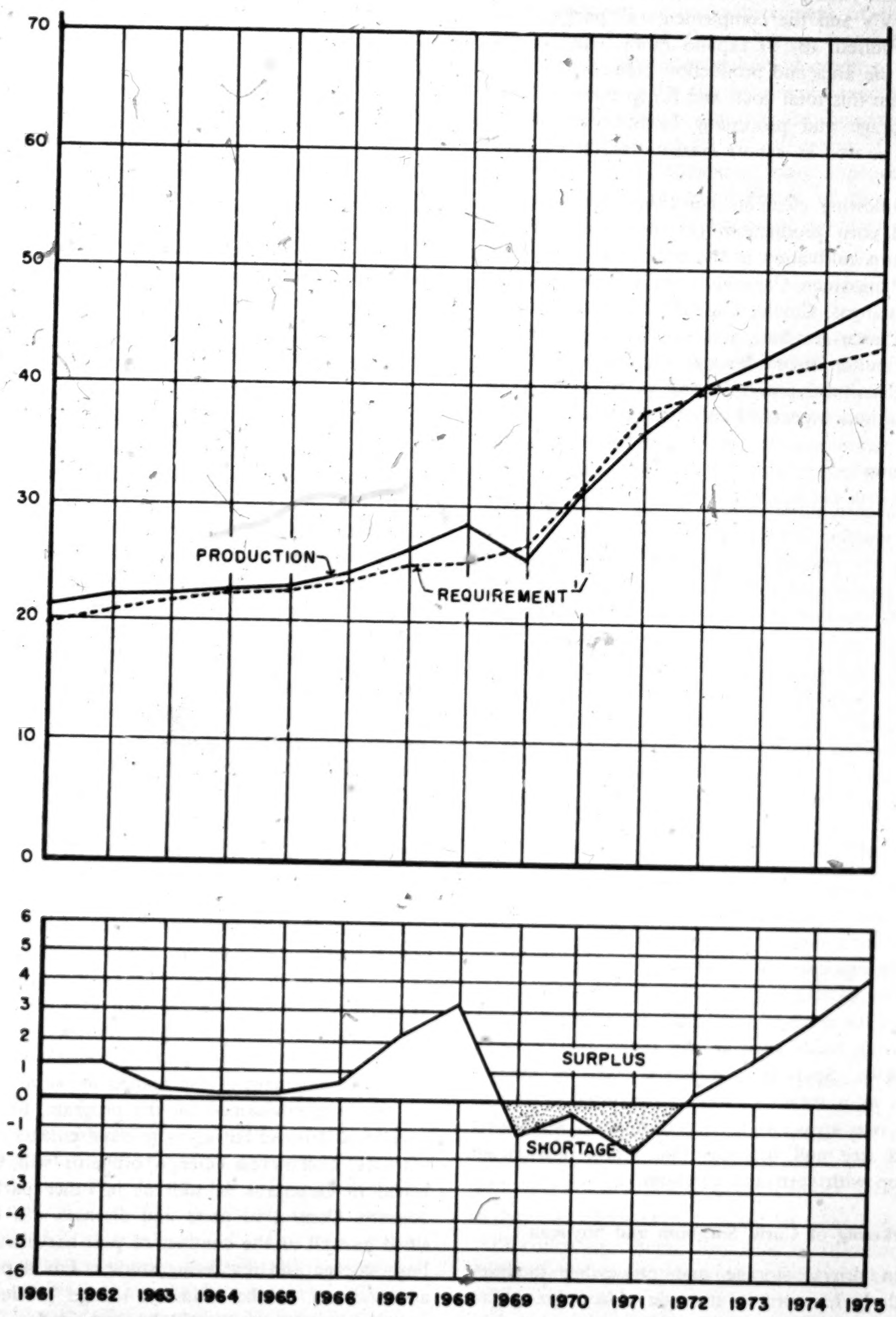
The feed grain production program is geared primarily to satisfy the growing needs of the animal-feed industry, to satisfy potential export markets, and to provide for the growing industrial uses of corn. The emphasis of the program is on the production of yellow corn, sorghum and soybeans.

1. Yellow corn

The utilization of yellow corn as animal feed has grown rapidly. Yellow corn, in fact, is the main component of commercial feed mixes (30 per cent by bulk) and it is expected that the demand for corn in the next four years will come from the feed-processing industries, especially because of the intensified meat production program. Since 1969, however, a shortage in corn supply, particularly of yellow corn, has been increasing (Figure 7.3). The production of yellow corn in 1970 was only about 50 per cent of the total demand of the feed industry during that year.

The primary objective of the corn portion of the feed grains program, therefore, is to bolster production of yellow corn in support of the growing need for this vital feed-ingredient. The target is an average of 8.2 per cent annual growth rate of yellow corn output during the Plan period. Total output is programmed to increase from 257 thousand metric tons of yellow corn in 1972 to 325 thousand metric tons in 1975. With these targets, the country will be self-sufficient in yellow corn after the first two years of the Plan period.

Figure 7.3
THE CORN SITUATION



1/ EXCLUDING REQUIRED BUFFER STOCK

The basic strategies in this program are (a) to increase the yield of corn through the utilization of both HYV's and the complementary "package" of inputs required, (b) to expand more than proportionately the area and production planted to yellow corn within this total goal, and (c) to establish adequate storage and processing facilities and ready domestic as well as export markets for the farmers' produce.

The following elements constitute the drive for increased corn production: (a) increased area for yellow corn cultivation in the priority provinces including Pangasinan, Cagayan, Isabela, Bataan, Nueva Ecija, Batangas, Cavite, Laguna, Oriental Mindoro, Albay, Camarines Sur, and Iloilo; (b) production and distribution of breeder and foundation seeds; (c) improved cultural practices; and (d) research work on the various aspects of corn production.

2. Sorghum

Yellow corn output will be supplemented by sorghum production for feeds. Under the feed grains program, the priority areas where sorghum growing will be encouraged will revolve around already established feed mill plants. This will include areas in the Ilocos region, Cagayan Valley, Central Luzon, Southern Tagalog, Bicol, Iloilo, and North and South Cotabato. Sorghum planting will be encouraged in sub-marginal upland areas, in traditional corn lands which are too dry for corn production, and as a succession crop in lowland ricelands without sufficient water for a second rice crop.

3. Soybean

The long-run objective of the soybean program is to meet the requirements of the animal-feeds industry. Current annual soybean meal consumption of the feed mills amounts to 65,000 tons, which can be realized from 40,000 hectares of soybeans. This is exclusive of the needs of small-scale factories producing protein-rich foods such as soy sauce, tahuri, tausi, and tokwa. Soybean production will be pushed through as a rotation crop to the usual corn and upland rice areas, as a succession crop to rainfed lowland rice and irrigated rice areas, and as an intercrop with corn and sorghum.

4. Marketing of Corn, Sorghum and Soybean

Grain driers, storage and processing facilities particularly for corn in strategic places throughout the country will be established. To further integrate farm production and marketing facilities for self-sustained growth of the industry, increased transport facilities and farm-to-market roads will be provided to farmers in the priority areas during the Plan period.

The stabilization of the prices of corn and other feed grains at levels which will guarantee farm producers profitable minimum prices for their produce will be given serious consideration.

Most important, the government will mount special programs to get buyers and farmers together. Efforts will be concentrated on the **organization of marketing cooperatives among farmers who will sign sales contracts with feedmillers and other buyers.**

D. Vegetables and Fruits

The program is aimed to ultimately increase vegetable production to meet local demand, thereby eliminating yearly importations. Emphasis will be placed on the initiation of backyard and truck gardening, and on the production and distribution of seeds of high-yielding varieties. About 142,000 kilograms of vegetable seeds are estimated to be produced in 20 seed farms throughout the country, giving emphasis to improved and outstanding varieties. The need for readily available seeds is particularly felt on semi-temperate vegetables. During the fiscal year 1971-72, the program will involve some 175,000 hectares with an estimated aggregate vegetable production of 1,850 thousand metric tons. The program will concentrate on 22 provinces which are near or around cities and thickly populated centers where vegetable shortages are critically felt. Fourteen of the provinces are in Luzon, mostly near or around the Manila area; three are in the Visayas; and five in Mindanao. Applied research and post-harvesting and handling studies will be conducted as a part of the program strategy. The Bureau of Plant Industry will coordinate its activities with other agencies like the U.P. College of Agriculture, Agricultural Productivity Commission, as well as with public and private schools and financing institutions, for a unified effort to improve and expand the vegetable industry.

The development of the mango industry in Guimaras, Iloilo is envisioned for the program, to meet not only local demand but also the requirements of foreign markets. Commercial mango orchards will be established in Guimaras as well as in other parts of the country. Control of pests and diseases will be intensified as well as the conduct of post-harvesting, handling, storage and marketing studies. For a permanent advancement of the industry, mango producers and exporters' cooperatives will be organized.

E. Meat Production

The target of the revitalized national livestock program is the production of meat and eggs to achieve goals programmed in three stages: first, the satisfaction of effective demand; second, meeting the nutritional requirement; and, third, the development of export markets for these products.

The objective in the first two years is to maximize production of the fast-multiplying animals such as swine and poultry. In the third, fourth, and subsequent years of the program, cattle and carabao production will be expected to contribute a much greater share of the total meat output through an increase in production efficiencies and in extraction rates by improved culling and selection.

In general, total meat production is currently programmed to meet effective demand by FY 1973 and to satisfy nutritional demand by FY 1975. The egg production program is targeted to meet effective demand by FY 1972. Efforts will also be exerted in the program period to develop a viable diary base. The possibilities of achieving this along the lines of toned milk and evaporated milk production are now being explored.

1) Swine

The objective of the swine program is to step up the production growth rate by 8 per cent every year. This target is expected to be achieved by providing adequate financing to be back-stopped by strong supportive extension services for the production activities of the private sector. Additional institutional support is to be provided by the intensification of veterinary services, the expansion of artificial insemination (AI) services in swine, and the formation of producer and marketing cooperatives.

At its present level of development, the swine industry is now in a position to develop an export market for quality swine breeding stock. The plan is to intensify exports of breeding stock to neighboring Asian countries over the four-year program period.

2) Poultry

The poultry development program envisions an average annual growth rate of 6.7 per cent of poultry meat production and 6.9 per cent for egg production in the next four years. The immediate target sought to be attained is an accelerated domestic production of poultry meat and eggs so that self-sufficiency levels might be attained within the first two years. Corollary to this self-sufficiency effort is increased production efficiency to spur a surplus of these food items for possible exports to neighboring countries.

In order to ensure achievement of the poultry production targets, the following measures will be undertaken: (a) consolidation of credit resources in order to provide for the necessary financing requirements of the poultry industry; (b) increased production of feed grains; (c) intensification of veterinary services; (d) development of more improved processing facilities; (e) improvement of the marketing system; and (f) the formation of producer marketing cooperatives.

3) Cattle and Carabao

The target is to attain a yearly carabeef (carabao meat) production increment of 8.3 per cent, to be derived primarily from unproductive and surplus stock. The program also includes a financing scheme for backyard carabao-fattening operations. The production target for beef cattle is to produce a yearly meat production increment of 6.8 per cent from FY 1972 to FY 1975.

The general plan is to improve production efficiency in terms of a higher calf crop and increased beef tonnage in the beef cattle industry through increased extension services in impact areas and the development of efficient production units in various parts of the country. Model production units are to be developed for range cattle operations, cattle-coconut operations, and feedlot operations. The basic features of these model units would be: improved pastures, increased financing facilities, and a higher level of management.

In addition to the above cattle-fattening schemes, the program also calls for an expansion of the successful pilot backyard cattle fattening program of the rural banks in Batangas, Pangasinan and Negros Occidental.

The government, in a joint effort with the milk processors, is now studying the feasibility of developing a milk production program aimed at displacing part of the milk processors' present imports. The scheme is for the milk processors to buy primarily caraballa milk with high fat content, add the imported non-fat solids required, can the resulting evaporated milk under their brands, and market the product. An alternate approach under study is the production of toned milk based on a barrio caraballa milk collection scheme. Problems in collection, handling, quality, sanitation control, and marketing are still being worked on.

In summary, the major supporting activities for

the development of the dairy industry include (a) a responsive national animal health program in which veterinary work for poultry, swine, cattle, and carabaos, shall be intensified; (b) an integrated national artificial insemination program for cattle, carabaos and swine to improve the productive performance of the country's cattle, carabao, and swine population with the use of semen from performance-tested sires; (c) forage and pasture development to include an intensified seed production program for pasture legume seeds; (d) an expanded feed-grains production program, especially in yellow corn, sorghum, and soybean, to support the feed requirements; (e) development of a livestock marketing system including the expansion of up-to-date livestock market news and information; increased support for the setting up of marketing standards and facilities, carcass grades for poultry, hog, and cattle; expansion of credit facilities and formation of more effective marketing cooperatives for livestock and poultry; (f) a national livestock extension service and manpower development program for the industry; and (g) undertaking of research priorities in the development of this industry.

F. Fish Production

The target for fish production is set at a yearly increment of 5.8 per cent, compared to the 3.8 per cent observed rate of growth in recent years. With this programmed production, it is anticipated that by late FY 1972 the country will be self-sufficient in fish and that, starting in FY 1973, the industry will be able to produce some surplus to meet both nutritional requirements and possible export demand.

The attainment of these production targets is programmed to come from the various sectors of the fish industry, but concentration will be placed on the development of inland fisheries.

The strategy calls for the redeployment of government resources into inland fishing, retaining only minimal government activities in the area of marine fishing. Commercial and municipal fishermen will of course be encouraged to improve their catch and hence increase total output. The main features of the fish production program are the following:

(a) **Increasing the catch in fishponds.** One of the main activities designed to accelerate the increase of production from fishponds is the increasing of yields per hectare through better management and the introduction of new fish varieties. The program envisions improving inland fish production from the targeted 9,000 of freshwater fishpond and 18,000 hectares of fishponds in the brackishwater areas.

The expansion of the country's fishpond base will be obtained through the planned effective coordination of the Philippine Fisheries Commission (PFC) resources with those of the Bureau of Forestry and the Bureau of Lands in the disposition of public swamplands to legitimate operators. The development of new areas will be supported by the government and private banking institutions through various fishpond financing schemes.

Another means of accelerating fish production in inland fisheries will be the extension work of the PFC technical men who will intensify their services to operators on the latest techniques in fishpond development and pond management. In addition to this effort, the PFC will also continuously expand and improve the fishstocking program by extensively stocking depleted inland waters with milkfish and common carp as well as with other prolific-reproducing species. Research on inland water and brackishwater fish is also being undertaken with the support of government and foreign assistance.

(b) **Increasing the catch in municipal fisheries.** This secondary program will be limited to assisting fishery outfits that do not use boats of more than 3 tons gross. Pilot fishing barrios will be selected in different parts of the country. Fishermen in these barrios will be assisted in motorizing their fishing crafts and will be given training on the use of more versatile fishing gear. The latest development techniques will be extended to the small fishermen through extension services. Through a financing scheme to be provided by banking institutions, particularly by rural banks supplying the needed credit assistance on liberal terms, loans will be extended to these subsistence fishermen in order that they may motorize their boats.

(c) **Increasing the catch of commercial fishing vessels.** The other secondary program is designed to assist fishing vessels of more than 3 tons gross. Offshore fishing, particularly the exploitation of tuna which is abundant in the territorial waters of the country, will be tapped. Large scale tuna purse seining and [illegible] bait fishing are being experimented on.

To supplement the program of commercial fishing, oceanographic studies and studies on the productivity of fishing grounds will be conducted.

(d) **Processing and marketing**. Pilot demonstration processing plants that will utilize fish and fishery products as raw materials in their operation will be established in strategic areas of the country. These plants will be integrated with the operations of established ice plants and cold storage facilities of the PFC. New ice plants and cold storage facilities will also be constructed in areas where fish distribution is a recurrent problem due primarily to storage problems. As of 1970 there were 16 PFC ice plants and cold storage facilities with a total capacity of 168 tons of ice and 1,145 tons of fish, respectively.

To facilitate the distribution of catch from commercial fishing, the Navotas Fishing Port, assisted financially by ADB, will be completed and a fish market constructed during the Plan period. In addition, the government will encourage the establishment of fish canneries near fresh and brackishwater fisheries, in order to satisfy the country's demand for canned fish now being imported from Japan and other countries.

4. DEVELOPMENT OF EXPORT CROPS PROGRAM

In addition to promoting new exports, development resources are being put in the promotion of traditional exports for the next four years, and these will be concentrated on increasing the production of the four major export crops: coconut, sugar, abaca and cigar tobacco.

A. Coconut

The coconut industry occupies a premiere position in the economy. It provides a source of livelihood for almost 440,000 families or about 2.6 million people. As of 1970, approximately 21 per cent or about 1.9 million hectares of cultivated agricultural land was planted to coconut trees with a total production of 1.7 million metric tons of copra and desiccated coconut products. The industry has been one of the leading dollar earners of the country. Coconut products registered about 20 per cent of total Philippine exports in 1970. Philippine copra constitutes about 60 per cent of the total world supply of this product, while copra and coconut oil combined comprise about 40 per cent of the world trade in these commodities.

The development of the coconut industry has long been hampered by a number of basic and traditional problems, the major ones being: low productivity; crude processing facilities and production methods at the farm level, with consequent low quality products; an inefficient domestic marketing system that gives the farmer less than 70 per cent of the value of his product; instability of prices of coconut and coconut products at home and in world markets; and lack of adequate financing and unavailability of adequate credit to coconut farmers.

The industry suffered heavy damage wrought by the typhoons and flood that hit the country in 1970. Typhoon damage on coconuts affects the bearing capacity of the coconut for about 3-4 years.

The general objectives of the present four-year program for coconut are the following:

(1) To increase production of coconut and coconut products to meet rising domestic consumption requirements for fats and oils while at the same time meeting the stiff competition on copra and coconut oil in the international markets;

(2) To intensify processing and utilization of coconut products and by-products for export; and

(3) To promote the systematic and orderly marketing of coconut products.

Toward these objectives, an agency reorganization shall be effected to obtain more coordinated and more concentrated action in the field of coconut production. The proposed agency setup has already been formulated as part of the overall government reorganization plan.

More credit financing will be made available to coconut farmers, at reasonable terms and conditions, for farm development. Coconut financing programs of various financial institutions will be adequately funded as to fan out the benefits to as many coconut farmers as are in need.

Short- and long-term credit assistance will be provided for financing production inputs, establishing new plantations, constructing and operating processing and manufacturing plants, and setting up large-scale marketing facilities. In addition, government policies will be re-studied with respect to trade, tariffs and taxation in order to reorient them toward the development of a more integrated coconut industry.

The scheme of development included in this four-year program is essentially short-range in nature. Nevertheless, the long gestation period of coconuts obviously calls for the start of projects whose effects will be realized only beyond the program period.

The three correlated and complementary short-range action programs which are essential to the development of the coconut industry may be outlined as follows:

(1) Increased Coconut Production Program

(a) Demonstration Plot Project. A number of one-hectare demonstration plots shall be established in strategically-located sites to serve as focal points of an intensified coconut farm extension campaign on cultural and farm management practices, apart from being a showcase and tangible proof of the effectivity of such techniques in increasing coconut productivity. The techniques involved will include cultivation, application of organic/inorganic fertilizers, cover-cropping, inter-cropping, and other improved coconut culture.

(b) Intensified Coconut Farm Extension Campaign. A complementary activity to the demonstration plot project will consist of an intensified coconut farm extension campaign to promote improved cultural and farm management practices among coconut farmers. While stressing the adoption and application of improved cultural and management techniques, the extension services will also be intensified to undertake studies on coconut production and initiate rural community development projects in coconut areas. Integral to this is the present UNDP-Philippine research and extension project designed to bring funds to bear on agricultural and processing research with respect to the problems of the coconut industry.

(c) Coconut Seedling Nursery Project. Coconut seedlings will be grown to replace not only trees damaged by typhoons, pests and diseases and diseases but also trees which have long passed their prime bearing stage. The aim is to bring up the national average density of 138 trees per hectare to the ideal of 156 trees. Likewise, new areas suitable to coconut must be be put under cultivation.

The program envisions the propagation and distribution to coconut farmers, at cost, of selected coconut planting materials to meet the requirements for rehabilitation of damaged plantations; the replacement of past-prime bearing trees; an increase in planting density; and the establishment of new plantations.

(2) Export Market Promotion Program

One of the basic problems of the coconut industry is the antiquated and consequently inefficient and costly marketing structure of the industry. Copra is still being produced in primitive "Tapahans" in much the same way as it was during the last century. Bulk handling, port, drying and storage facilities are generally inadequate and inefficient. Over-shipment, undervalution and similar malpractices and anomalies have also contributed in past years to deprive the economy of legitimate earnings.

The specific major activities that will be implemented during the Plan period are the following:

(a) The establishment of a more aggressive coconut export promotions program to maintain or improve our traditional markets for coconut products as well as to seek new markets especially in those importing countries which are not directly trading with the Philippines;

(b) The construction of bulk handling terminals and warehouses to improve the present storage and handling facilities;

(c) The construction of feeder roads, bridges, ports and wharves to reduce trading costs and to facilitate the movement of copra and other coconut products;

(d) The acquisition and/or construction of tugboats and barges for interisland movement of coconut and other products as well as to facilitate loading by ocean-going vessels; and

(e) Cooperation with the Asian Coconut Community in joint efforts to seek expanded markets and uses for such products.

(3) Coconut Industrialization Program

A major part of the program will consist of the removal of bottlenecks that now obstruct further development and exportation of the coconut oil and desiccated coconut industries.

In addition, attention will be given to the processing of high quality coir and coir products, charcoal and other derivatives from the coconut shell, as well as of other coconut products and by-products.

As a means of promoting this end, an accelerated research and development program will be developed toward the improvement of existing products, processes and equipment for coconut industrialization.

(4) Long-Range Program

The four-year program envisions the establishment of seedfarms which will be located in Luzon and Mindanao. Intensified extension work radiating from these seedfarms will be undertaken to provide farmers with technical know-how in proper seednuts selection and to disseminate

planting and replanting techniques garnered from these farms toward the increase of yield of nuts. In addition, basic long-term research will be devoted toward developing shorter-maturing, high-yielding seed varieties and better processes for producing coconuts and coconut products.

B. **Sugar**

The immediate target of the program is to meet both the domestic and basic export requirements of sugar. In physical terms, the magnitude of the production task of the sugarcane farmers for the next four years is indicated below:

CROP YEAR	EXPECTED TOTAL SUGAR SUPPLY [1]	BASIC SUGAR REQUIREMENT		
		DOMESTIC CONSUMPTION	R.P. QUOTA IN U.S.	TOTAL
	(In thousand short tons, raw value)			
1969-70	2,035	852	1,369	2,221
1970-71	2,205	915	1,504	2,419
1971-72	2,303	981	1,322	2,303
1972-73	2,506	1,050	1,322	2,372
1973-74	2,737	1,122	1,322	2,444

[1] Sugar production considering old and new sugar mills as of June 1971.

The expansion of the anticipated sugar requirement is largely accounted for by domestic consumption. The aggregate annual rate of increase in domestic demand for sugar and sugar by-products as food by household and as raw material by industries is estimated at about 6.7 per cent during the next four years. On this basis, together with the basic sugar requirement to meet the quota in the U.S. market, sugarcane production is programmed to increase by about 3.8 per cent per year. However, as a matter of policy, the government will not consider approving the establishment of any additional new sugar mills, at least in the next four years.

On the basis of the sugar demand and sugar supply situation, the construction of additional sugar mills in recent years seems to result in overcrowding in the sugar industry. Even if one takes the optimistic view that sugar exports will still expand in the immediate future, it is noticeable from the preceding table that the expected total sugar supply of existing sugar producing facilities may meet the requirement under such given situation.

In some sugar milling districts, there has been a steadily growing problem of inadequate supply of cane. Sugarcane yields have been declining and adverse weather conditions have compounded the problem. The measures being carried out are designed to improve farm productivity through the use of greater quantities of fertilizers, the substitution of existing varieties by the newly developed high-yielding canes of the Philippine Sugar Institute (Philsugin) and the establishment of irrigation facilities. In the long run, the viability of the sugar industry will depend on the effectiveness of productivity and cost-reducing measures presently being applied to improve productivity.

As a means of generating additional increments in total output, primary emphasis will be placed toward increasing productivity of existing sugarcane lands. Limited efforts will be undertaken to increase output via acreage expansion since this approach usually takes a longer gestation period and requires a much larger investment than that required for increasing yield in areas already under cultivation.

Extensive usage of yield-increasing technology in the form of high-yielding varieties, fertilizers, chemicals and irrigation is identified as the primary factor that will contribute most to increase output levels.

The production activities in the sugar industry will include the following:

(1) **High-yielding cane multiplication and propagation.** Philsugin research and development efforts have produced a number of high-yielding varieties with an average yield of around 150 piculs per hectare. These varieties will be used for multiplication in order to provide sufficient quantities of cane points for commercial plantings.

(2) **Increased fertilization.** The current fertilizer usage rate by sugar planters in this country varies widely from 0.5 metric ton per hectare in many places in Luzon to 1.5 metric tons per hectare in some areas in Negros. Studies have demonstrated that average yields can be increased by about 10 piculs per hectare per additional 100 kgs. of ammonium sulplate or per kg. of nitrogen. The target areas are those milling districts where fertilization usage rate is below the Philsugin's recommended rate and where current production does not fully utilize the milling capacities of the centrals.

(3) **Improved irrigation.** At present, barely 5 per cent of the 300,000 hectares planted to sugar is irrigated. Studies have shown that irrigation increases yield some 10 piculs per hectare. A concentrated drive to increase irrigation facilities will therefore be spearheaded by the government.

(4) **Synchronization of farm and mill operations.** Farm and mill operations must complement each other if maximum increase in production is to be attained. It is felt that closer coordination between millers and planters should be achieved in order that sugarcane mills may be provided with the required quantities of cane to enable them to attain continuous production at their maximum capacities.

C. Abaca

The abaca industry has a bleak immediate past. Synthetic fibers have cut heavily into the traditional market for Manila hemp, particularly in the field of cordage. Sisal and henaquen, two traditional hard fiber competitors of abaca, also suffered from the incursion of synthetics, especially in the field of agricultural twins for baling purposes. Moreover, in the face of declining demand for traditional fibers, the biggest producers of sisal and henaquen, namely, Brazil, Anquin, and Mozambique, have been out-pricing Philippine abaca in order to maintain their markets.

Recent developments in the pulp and paper field, however, may yet save the abaca industry if a technological breakthrough can be found to use the abaca stem for the production of pulp. A pilot plant for the production of pulp and paper from abaca has been considered. The plant in Iligan City reportedly will use about 15 metric tons of abaca pulp a day. The investment priorities plan of the Board of Investments (BOI) includes the manufacture of long-fibered pulp and paper which can be further refined and perfected; this will result in the establishment of pulp and paper plants using abaca that will certainly cushion the adverse impact of synthetics on the abaca industry. The government is presently encouraging stepped-up research in this direction.

D. Cigar Leaf Tobacco

The target for cigar leaf tobacco production is set at an average annual growth rate of 9.7 per cent during the four-year period. This would raise production output to 60.0 thousand metric tons at the end of the program as compared to the yearly average of 20.4 thousand metric tons in 1965-69.

The objectives of the program are as follows:

1. To increase production of cigar filler and wrapper leaf tobacco in order to build up the annual buffer stock to meat local and foreign market requirements;
2. To reduce the cost of production and improve the quality of the harvested leaf through better standardization, grading, processing and packing;
3. To stabilize the price of leaf tobacco at a level that will provide an effective production incentive for tobacco growers; and
4. To maintain and improve the country's relative share in existing foreign markets.

The foregoing objectives will be attained through a program consisting of a number of complementary and interrelated projects, namely, the Price Stabilization, Trade Promotion, Research and Extension, and Grading and Standardization, projects.

To provide a production incentive to tobacco growers, the price of their produce shall be stabilized at remunerative levels through price stabilization projects. These projects involve the purchase of cigar leaf tobacco directly from the growers in order to provide leverage for better prices and promote free and effective competition among the few big buyers of tobacco leaf who are mostly aliens.

The Trade Promotion Project is intended to maintain and improve existing and potential foreign markets for our cigar leaf tobacco. A growing market and a sustained demand for this commodity are conditions for achieving stable prices and increased production.

The Research and Extension Project will assist and encourage tobacco growers to increase production, reduce production cost and improve the quality of cigar leaf tobacco at the farm level through improved cultural practices and farm technology. These involve the use, among others, of certified seeds of high-yielding tobacco varieties, better soil fertilization and management, better pest and disease control measures, proper harvesting and curing methods and facilities. A supervised credit system to provide loans, through rural banks, for the purchase of essential production inputs like fertilizers and insecticides and of spraying equipment, will be tried in high priority areas where high quality cigar leaf tobacco are now being grown in commercial quantities.

Finally, the Grading and Standardization Project will attempt to insure and maintain the high quality of leaf exports through uniform and standard grading and packing. This is necessary to enable Philippine cigar leaf tobacco to maintain remunerative export prices and to continue its patronage by foreign buyers. All these can be achieved through an intensified edu-

cation and information campaign among tobacco growers, processors and exporters, and through a more rigid enforcement of existing government tobacco grading rules and regulations.

5. LAND DISTRIBUTION PROGRAM

Land resource classification to identify and delineate areas suited for crop production, for pasture development, for forestry, and for fishery development, is necessary to effect maximum efficiency in land-use. Land identified as forest should be classified further into permanent forest, commercial forest land, or critical watershed areas, so that full enforcement of laws, rules and regulations on forest protection, reforestation, forest utilization and conservation can be attained.

One major significance of land classification lies in the necessity of accelerating the release of agricultural land to present occupants and landless farmers in the country. With an intensified drive on land classification, the release or reservation of all lands suitable for agricultural and other productive uses can be facilitated.

It is estimated that it will take 100 years and 300 years, respectively, to reforest critical areas and total deforested areas. There is a need to identify these areas in order to accelerate present reforestation activities. This will be given emphasis in the current program, since the land resource constitutes the prime resource of the country. Areas suitable for pasture development should be clearly identified so that these areas can be made available for development into livestock production centers. For proper fishery resource utilization and conservation, inland fishing and offshore fishing areas should also be delineated. An inventory of deep-sea fishing potentials should be conducted so that these potentials can be exploited to the limit. For areas classified as suitable for crop production, further land capability classification work should be done to delineate the land best suited for the production of particular crops. This is necessary for the following reasons:

1. Land capability classification is necessary for the country to achieve maximum production through product specialization and productive efficiency. Once major crop areas are identified, the necessary complementary services such as irrigation, extension, credit, and marketing facilities can be advantageously located.

2. Land already being farmed in small-scale units should be developed primarily for food production. The development of these areas should be undertaken through the intensive use of labor by adopting labor-intensive technology which requires little capital.

3. Lands which are suitable for large-scale commercial production such as public lands, idle private lands, and under-utilized private lands should be developed primarily for the raising of commercial crops either for domestic processing or for exports.

This activity becomes especially significant in the light of the need to diversify some land away from rice into other food crops because of the potentials for abundance in this commodity and the bleak prospects for rice exports.

The introduction of new technologies in Philippine agriculture, the change of outlook in our farmers, and the continued acceptance of the products of research and technology have moreover reduced the pressure on the limited land resources of the country, thus giving more room for the expansion and diversification of agricultural output.

Such expansion and diversification, however, is greatly dependent on the quality or production-supportive capability of the soils. Area specialization for a specific crop or crops will be the target in taking full advantage of natural soil-climate endowments.

Thus, the Philippine Government has already initiated moves to launch a Land Classification and Soil and Water Management Project designed to classify all Philippine soils into terms meaningful for operational purposes.

Land classification efforts will thereafter be implemented by various agencies of the government, with DANR supervising and coordinating the program.

The major activities included in the program are as follows:

(a) Classification of the remaining unclassified land into permanent forest, agricultural land, etc. This shall also include the re-surveying and reclassification of existing agricultural lands and forest areas in order to define the correct demarcation and establishment of permanent boundaries of forest areas and other land-use for non-forestry purposes.

(b) Measurements of land, both public and private, in order to identify boundaries and corners of parcel or parcels of land for the purpose of titling. This will include the conduct of cadastral surveys with the use of a combination of aerial photogrammetry and the conventional ground methods with transit and tape.

(c) Detailed soil survey and land capability classification for all areas that are currently agriculturally productive, including lands that have been classified as alienable and disposable. This will include collection of soil samples throughout the country and the analysis of their chemical and other properties

in order to determine the capability of each classified type of soil.

(d) On the basis of the land capability classification, land-use planning shall be effected by utilizing the current marketing situation for both inputs and outputs of agriculture as a basis for determining the optimum use of land resources.

These major activities shall be undertaken every year within the program period, and the phasing will be based on provinces selected as priority areas in the present effort. However, updating of information on the provinces will be made so that the amount of work and the sequential order of activities are evenly distributed over the four-year period.

To speed up the distribution of public lands to occupants and landless farmers, supporting policies and measures are provided in the Plan, namely:

A. General Policies

1. Concentrate activities in critical provinces where unrest is prevalent.
2. Intensify land classification work by increasing the number of adequately manned and equipped land classification parties.
3. Revise existing policies and procedures to expedite land classification and releases of land for agriculture and other productive uses in accordance with specific land-use capabilities.
4. Update existing policies and procedures regarding field survey and disposition of lands to accelerate coverage of occupied areas.
5. Streamline the procedure of processing land applications to effect short-cuts, eliminate unnecessary requirements, and hasten the signing and registration of patents.

B. Specific Administrative and Legislative Measures

1. Revise the land classification criteria to enable the release or reservation of all lands suitable for agricultural and other productive uses regardless of the present soil cover.
2. Maximum use of topographical maps (1 : 50,000 scale) and aerial photographs for determining preliminary boundaries of areas being classified.
3. Create additional Land Classification Parties and redeployment of existing ones.
4. Utilization of aerial photographs, whenever feasible, in photo-interpretation and soil surveys to shorten time schedule.
5. Amend the Public Land Act to allow the delegation to the Director of Lands of the power to approve appraisal and reappraisal of public lands and improvements for disposition or concession.
6. Employ photo-cadastral mapping whenever possible.
7. Initiate an extensive information campaign with the private sector and local officials regarding the acquisition of public lands and the elimination of land conflicts and land-grabbing.
8. Revise the policies and procedures on claims and conflicts to speed up their investigation and resolution.

6. CONSERVATION OF NATURAL RESOURCES PROGRAM

Out of the total Philippine area of 30 million hectares, over 21 million has been classified. Of the total classified land, 8.5 million have now been identified as timberland. During the Plan period, reforestation of bare mountains particularly in critical watershed areas in Luzon will be given preferential attention.

A substantial portion of the remaining unclassified public domain will be completely classified so that all the necessary timberland could be set aside as permanent forest reserves and bases for the wood industries. Furthermore, protection measures will be intensified through better implementation of laws and expanded programs in order to minimize waste of wood products and diminution of water resources.

A. Forest Protection

The twin goals of forest protection are: (a) to step the encroachment into, and illegal occupancy of, forest lands by squatters and settlers and (b) to prevent the illegal removal of forest products from the public forests by loggers and other forest exploiters.

If these goals are attained, critical watersheds will be under continuous protective forest cover. This will help minimize drought, floods, erosion and sedimentation which have wrought havoc on agricultural production. Furthermore, all harvest from the forest can be programmed and controlled so that the maximum economic benefits from them can be achieved.

The measures necessary to fully implement the forest protection project are as follows:

(1) Resettlement and Training

This will include the resettlement of squatters from forest areas to suitable agricultural land in cooperation with the Bureau of Lands. Manpower training of kaingin farmers on the skills necessary for alternative job opportunities should be introduced.

(2) Intensified Public Information

Using the various district forestry centers spread throughout the country as nuclei, a massive public information drive to supplement existing campaigns must be launched by extension foresters to (a) inform the farmers of the value of forests; (b) acquaint them with the catastrophies associated with deforestation; and (c) teach them skills useful in tree-farming and other tree-planting activities.

The training of extension workers prior to launching the public information drive is essential.

B. Forest Management (Selective Logging) and Watershed Management

Forest management, particularly the implementation of the selective logging program, is an effective means for attaining sustained yield, i.e., perpetual yield of timber without depleting the stock in the process of harvesting. This is designed to perpetuate not only the existence, but also, and more especially, the productivity of the forest.

Watershed management, if implemented properly, will make possible timber harvesting from watershed areas without the adverse effects of forest exploitation. This project is of utmost importance, and will be undertaken in order that many critical watershed areas may be placed under multiple forestry use for maximum productivity.

In watershed areas where non-forestry practices are not existing, the task will be to introduce measures to conserve water and soil, such as terracing, mulching, and cover-crop planting.

C. Reforestation

Five million hectares of open lands, including some 1.4 million hectares of critical watersheds, are in need of reforestation. The current annual planting rate is only 30,000 hectares. At this rate, it will take almost two centuries to reforest all the open mountain areas. Considering the urgency of restoring the forests both for the production of timber products and for the protection of watersheds, there is a need to modify present methods. Among these are:

(1) Aerial seeding

This method appears more costly because it involves the expensive use of airplanes and because more seed materials are needed to allow for the high mortality as compared to direct seeding. However, the added cost will likely be offset by the faster establishment of much needed forests. The Philippine Air Force will assist in this project.

(2) Selective Reforestation

The method presently adopted involves the replanting of all open areas. Speed at minimum effort could be attained by reforestation of only the mountain ridges and summits, leaving the lower slopes vacant. Natural regeneration will eventually cover these vacant spaces. This approach combines artificial planting with natural regeneration to hasten the rate of forest restoration. This will be encouraged during the next four years.

(3) Intensification of Reforestation Research

The research plan involves a ten-year period. Efforts will be concentrated on improving the quality of planting stock, improving planting techniques, classifying and matching plant species to sites, and obtaining basic growth data of species that have been planted.

(4) Forest Products Research

Research efforts directed towards the reduction of wood wastage and the possible utilization of more non-commercial species will be accelerated in order that maximum benefits can be derived from present products.

D. Conservation of Wildlife and Parks Management

A major effort will be exerted to effect an orderly utilization of biological natural resources that will make for ecological balance. Protection and management of wildlife resources will be intensified. To this end, legislation will be proposed to strengthen the National Parks System in the country and provide greater protection to its wildflife, particularly the monkey-eating Eagle and the Tamaraw. There will also be a proposal to declare scenic areas and wonders of nature in the Philippines as national parks. The activity goal is to undertake park development either on a contractual or administrative basis, giving priority to parks already accessible to the public, in order to emphasize the values of outdoor recreation to the public.

In a nutshell, the specific projects to be undertaken by government agencies to implement the conservation of natural resources action program are as follows:

ACTION PROGRAM	RATIONALE	IMPLEMENTING PROJECT	AGENCY
1. Reforestation	To effectively reforest denuded public lands, particularly critical watersheds.	a. Plantation Management	RA
2. Forest Protection	To control erosion and floods as well as extend useful life of dams by decreasing the siltation rate.	a. Watershed Protection and Improvement b. Forest Research	BF.
3. Forest Landuse	To optimize exploitation of timberland.	a. Forest Management and Land uses	BF
4. Parks & Wildlife Conservation and Tourism Promotion of National Parks	To maintain the ecological balance, provide recreational facilities, promote tourism and conserve wildlife.	a. Conservation of Wildlife b. Maintenance of National Parks	PWO PWO
5. Conservation of Fisheries	To sustain productivity of fishery resources.	a. Fishery Conservation	PFC
6. Control of Erosion	To conserve the productivity of agricultural land by maintaining the topsoil.	a. Erosion Control	BS

7. SUPPORTING PROGRAMS

The characteristics of the present agricultural organization entail an urgent need for the government to mount special supporting programs designed to give the farmer the opportunity to own the land he tills and to supply him with adequate and better irrigation facilities. There is also the complementary and urgent need for him to obtain economies of scale in production and in marketing, and to avail of reliable financing at low rates of interest. The farmer needs to be guided on decision-making in his farm business through more accurate and timely production and market information.

A. Land Reform

The implementation of the land reform program since the passage of the Land Reform Code in 1963 has been greatly handicapped by inadequate financing and poor government organization and management.

Some progress has been achieved, however. Leasehold systems are now being implemented in practically the whole of Central Luzon, Cavite, Laguna, Bohol, Samar, and some provinces in Southern Mindanao and in the Bicol region. As of the end of FY 1971, there were 236 cities and municipalities under the leasehold system covering about 315 thousand farmers working an area of 788 thousand hectares of palay and corn farms. In addition, there are a number of settlement projects, agricultural landed estates and residential estates administered by the government.

The accelerated program of land reform is designed not only to convert share tenants throughout the country into either leaseholders or landowners but also to raise farm productivity.

Republic Act 6389, otherwise known as the "Code of Agrarian Reforms of the Philippines" signed into law only this year, provides, among others, for the automatic conversion of the share tenancy system in the country into leasehold.

Hand in hand with the conversion of tenants into leaseholders and eventually into owners, the government will mount a special drive toward increasing the productivity of these newly independent farmers. The government is now determined to combine the efforts of its agencies into an integrated program for increased agricultural productivity. Toward this end, a coordinated and intensified food production drive project in land reform areas is now being implemented in Nueva Ecija. This program of coordinated action will be expanded to all other land reform areas.

An intensified agricultural productivity effort will also be directed at the various settlement and landed estate properties including newly-opened public land now being owned and/or managed by the government

Under the expanded program, alienable and disposable portions of the public domain will also be segregated and declared available for family-size farming operations. The imposition of agricultural land tax under the provision of the new measure strengthening the Agricultural Land Reform Code is expected to promote further the productive and effective utilization of land while, at the same time, preventing the commercialization of real estate.

In all these activities, the development programs consisting principally of rice, white corn and feed

grains, vegetables and fruits, livestock and poultry development, and fishery will be extensively carried out in land reform areas.

To finance the agrarian reform program, a financing bill was recently signed into law now known as Republic Act 6390 or the Agrarian Land Reform Special Fund. This new law provides for the creation of an Agrarian Special Account to be constituted out of a portion of the proceeds of the stabilization tax being collected under R.A. No. 6125, as amended. In addition to the existing appropriations in the annual appropriations act, a fixed amount of ₱50 million has been set aside annually for the expenditure of the Agrarian Reform Program. For fiscal year ending June 30, 1972, the allocation of this Fund shall be as follows:

	(IN MILLION PESOS)
(a) For additional lending operations of the Agricultural Credit Administration ...	20
(b) For capital contribution of the government to the Land Bank	20
(c) For land development, resettlement, survey, subdivision and the issuance of titles by agrarian reform agencies	10
TOTAL	50

The funds accruing annually to the Special Account after June 30, 1972 shall be allocated as follows:

	(IN MILLION PESOS)
(a) For additional contribution to the Agricultural Guarantee Fund which is to be established under this Act	20
(b) For capital contribution by the government to the Land Bank	10
(c) For lending activities of ACA	10
(d) For land development, resettlement, survey, subdivision and the issuance of titles by agrarian reform agencies	10
TOTAL	50

For additional funding, the remaining undisposed assets of the government listed in Schedule "A" of R.A. No. 5169 are to be transferred to the Land Bank. Also, the shares of stocks of the National Government in the Lepanto Consolidated Mining Company will be transferred to the Agricultural Guarantee Fund, with the proceeds of the shares of stock to be utilized for the agrarian reform program.

Finally, an essential ingredient of this vastly increased program of land-tenure conversion and increased agricultural productivity will be the development and massive improvement of the technical expertise, organization, and management of the various land reform agencies involved so as to cope with the increased work-load that such a program will necessitate. This will be done by the effective organization and sustained personnel development and training programs designed to upgrade the capabilities of the bureaus and offices including the Agricultural Credit Administration in the Department of Agrarian Reform.

B. Irrigation

During the past four years, the irrigation program has increased the irrigated areas by about 375,400 hectares. In the present four-year program, the objective is to further expand the physical area to be served by improved irrigation and drainage systems by about 315 thousand hectares in 1972-75 (Table 7.1).

Table 7.1—REVISED INFRASTRUCTURE PROGRAM
PHYSICAL GOALS
IRRIGATION

SUMMARY

PROJECT CATEGORY	PHYSICAL TARGETS		PHYSICAL ACCOMPLISHMENTS		ANNUAL PHYSICAL TARGETS			
	FY 1970	FY 1971	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
Physical Goals								
a. Rehabilitation, Has.	3,000	1,000	500	500	1,300	1,300	2,600	7,500
b. National Gravity, Has.	70,000	48,000	21,150	16,140	22,230	25,800	97,500	29,600
c. Communal, Has.	4,000	4,000	14,751	3,737	4,000	4,000	8,000	6,000
d. Pumps, Has.	38,550	19,625	8,942	30,427	26,750	26,750	27,125	25,000

By the third year of the Plan, most of the major irrigation projects will be fully operational. The program target will be attained through:

1. Maintenance and rehabilitation of existing national and communal gravity irrigation systems;
2. Completion of on-going projects;
3. Construction of new gravity systems, both national and communal, as well as installation of additional irrigation pump units;
4. Implementing projects with external financial assistance such as the NIA-ADB Water Management Project, NIA-UNDP Ground Resources Development Project, Upper Pampanga River Multi-Purpose Project, and NIA-ADB Cotabato Project; and
5. Survey and feasibility study of new sites for future irrigation development.

Details of some of the specific projects mentioned in (4) and (5) above are presented below:

(a) Upper Pampanga River Project

The project will consist of the Pantabangan dam reservoir, Talavera diversion system, Moringalo dam and reservoir, Pantabangan power plant and transmission system, irrigation works, and fish conservation and recreation facilities.

The project will provide and regulate water for the integrated operation of existing irrigation systems and additional new areas in Central Luzon. Upon the completion of the project, some 76,000 hectares will be provided with year-round irrigation. The implementation of the power plant project will provide electric energy mainly to deep-well pumps which will exploit groundwater for irrigation.

The costs will include the foreign currency component estimated at $60 million and a local currency counterpart of ₱200 million to be provided by the Philippine Government. The World Bank has already committed a loan of U.S.$34 million for the structures of the irrigation phase. The cost of the power phase will be negotiated as an additional loan, depending on the results of the studies presently undertaken.

As of December 1970, overall accomplishment of project was 8.5 per cent of all planned activities. Present activities in the project include the construction of access roads to the dam site, detailed structure site surveys, and resettlement of those adversely affected by the project.

(b) NIA-UNDP Groundwater Development Project

This involves the establishment of two projects in Nueva Ecija which will lead to the tapping of groundwater resources for the irrigation of good ricelands; and predevelopment surveys in five provinces to assess the groundwater potential for future development. The pilot project to be set up in Guimba will provide tubewell irrigation for 1,000 hectares of ricelands; the other project will be established in Peñaranda where 2,000 hectares will be provided full irrigation from surface and groundwater supplies.

The results of these pilot projects will provide the necessary data and information to be used in the formulation of a future project proposal for the external financing of a bigger scale groundwater development project.

(c) NIA-ADB Cotabato Project

This is a package project consisting of the following projects within the Cotabato River Basin: (a) Banga River Irrigation Project which is aimed at irrigating about 1,860 hectares within the municipalities of Banga and Norala, South Cotabato. The service area is a portion of the vast Allah Valley which is proposed for future development as part of a long-range program for the Cotabato Basin; (b) the Marbel River Irrigation Project which is to serve an area of 2,720 hectares in the municipality of Koronadal, South Cotabato; and (c) the M'lang River Irrigation Project that will cover an area of 2,850 hectares in the municipality of M'lang, Cotabato.

Each project will have its diversion works, conveyance (concrete and earth) channels, canal structures and farm ditches, with their corresponding regulating measuring devices; and will also be provided with drainage facilities and access roads.

In the Marbel Project, a 720-kilowatt hydropower plant will be installed to augment the present power needs of Koronadal.

The ADB has approved a loan of $2.5 million to cover the foreign currency requirements of the project.

(d) Feasibility Study of Magat Multi-Purpose Dam

The principal features of the study include the construction of a high dam across the Magat River, about 55 km. upstream of its confluence with the Cagayan River, to create a reservoir for purposes of: (a) generating a power potential of 100,000 kw; (b) allowing the irrigation of 74,000 hectares of agricultural lands on a year-round basis; and (c) controlling 70 per cent of floods in the region.

Efforts of all government agencies involved in activities concerning irrigation development will be co-

ordinated. These agencies and their contributions to the program are as follows:

The National Irrigation Administration (NIA) will be responsible for the survey, planning and designing, and supervision of construction of projects as well as subsequent operation and maintenance of the gravity irrigation systems. NIA will continue to engage the services of private contractors who shall be screened and selected through public bidding, and/or avail of its resources. When feasible, the services of the Army Corps of Engineers and/or Philcag may be called upon.

The Irrigation Service Unit (ISU) will be responsible for activities relative to the installation of irrigation pumps. The ISU will receive applications for pumps, conduct surveys of proposed sites to determine their technical feasibility, and prepare plans and designs for pump installation for the guidance of applicants. ISU will also provide occasional supervision in the installation and operation of pump projects. The expenses for canalization, installation, operation and maintenance will be for the owner's accounts.

The Presidential Arm on Community Development (PACD) will undertake the construction and installation of minor gravity and pump systems on a self-help group action basis. The PACD and the local and/or provincial governments will furnish the needed materials not available in the locality, and the barrio council will furnish the labor and additional materials which are locally available.

The Agricultural Productivity Commission (APC) will perform a subsidiary role in irrigation development, mainly stressing the organization of farmer's irrigation associations.

The Bureau of Soils (BS) will undertake the soil survey and soil profile analyses in all irrigation projects to determine irrigability and water requirements, soil-waterplant relationship, and rotating cropping feasibilities. Also, the planning, designing and supervision of the construction of farm ponds and check dams within the farm for soil and water conservation purposes will be borne by the BS. The impounded water will be utilized for irrigation, domestic water supply, fish culture, and recreation.

C. Agricultural Cooperatives

Integral to the total land reform effort and agricultural productivity drive is the revitalization of the cooperative movement. This program will allow farmers to avail of economies of scale in both production and marketing which cannot now be achieved due to the widespread fragmentation of landholdings into small farming units.

Of the 602 farmer cooperative marketing associations listed as being in existence in 1967, less than one-third are considered active. This situation has occurred for three principal reasons: firstly, uninterested farmers were induced to form cooperatives through the provision of special incentives such as subsidized fertilizer, equipment and loans; secondly, most cooperatives were inadequately financed both by their incorporators and by the government; and thirdly, most of the cooperative managers were not competent and some were downright dishonest. As a result, many farmers joined cooperatives simply to obtain the initial benefits offered to them, and then disappearing from active membership and reneging on their financial and membership obligations therafter.

A four-year program for developing agricultural cooperative enterprises is included as an integral part of an overall program on the development of cooperatives.

Special management development programs will be undertaken to upgrade available expertise in the management of cooperatives.

D. Agricultural Credit

It must be noted that a much greater amount of agricultural credit will be required in the program period both because the floating exchange rate has brought about substantial increases in the prices of agricultural inputs and because of the expanded agricultural program contained in this Plan. During the period 1962-1966, total loans granted to the agricultural sector averaged ₱1,436 million annually. In FY 1969, this had risen to a total of about ₱1,824 million, with an estimate for FY 1970 showing a drop to ₱1,250 million or less because of generally tighter conditions this year. For FY 1971, the estimated available credit for agricultural sector, including credit for marketing, processing and warehousing, is about ₱4,106 million.

During the Plan period, the total estimated credit required to support the agricultural program will amount to ₱4,651 million in FY 1971, growing to ₱5,935 million by FY 1974. This amount of credit, broken down into major areas of activities, are as follows:

FISCAL YEAR	PRODUCTION	STORAGE, PROCESSING WAREHOUSING	MARKETING	TOTAL
		(In million pesos)		
FY 1971	2,191.0	470.0	1,990.0	4,651.0
FY 1972	2,482.01	532.3	2,236.5	5,250.9
FY 1973	2,645.3	567.0	2,394.0	5,605.9
FY 1974	2,801.2	603.7	2,530.5	5,934.6

In FY 1969, agricultural loans were heavily concentrated on loans to rice. The following data show this emphasis:

LOANS FOR	AMOUNT (IN MILLION PESOS)	PER CENT OF TOTAL
Rice	₱893.0	49.0
Corn	69.8	3.8
Other Food Grains	253.0	13.9
Fruits and Vegetables ..	171.3	9.4
Fish	160.3	8.8
Livestock and Poultry ...	276.4	15.1
TOTAL	1,823.8	100.0

The intention of the program is to expand loans to sectors other than rice as a percentage of total loans granted, while at the same time increasing the loan amounts to rice in absolute amounts to match the growing needs of this important sector. In line with the expanded food production program, greater amounts of credit will be channeled to the corn and feed grains area as well as to the areas of meat and fish production.

The government will coordinate all government and private financial institutions to concentrate on lending in only a few priority areas rather than dissipating financial resources over so many areas. At the same time, attempts to program amounts needed for capital investments as against working capital loans will be renewed to arrive at more refined estimates. Based on these, proper roles will be assigned to the various lending institutions so as to spread the burden of financing to the right parties.

The program envisions a key role for the rural banking system. Wherever possible, financial programs will be routed through rural banks. The government will try to add new and more imaginative lending programs to the present ones now being undertaken by rural banks under the supervision of the Central Bank.

The Agricultural Credit Administration will concentrate its lending operation in areas not serviced by rural banks, with emphasis mainly on supplying the credit needs of cooperatives. Studies will be undertaken on the possibility of channeling the funds and lending operations of the ACA through rural banks instead of directly to individual farmers.

E. Research and Statistics

Agricultural development of the country in the coming years will depend to a great extent on the formulation of sound and realistic plans. The constantly mounting pressure on the agricultural resources of the country to support a rapidly increasing population necessitates carefully designed plans and programs of development. To be of utmost value, these plans should be based on adequate, timely and accurate agricultural information and statistics.

The expansion of supporting statistical services shall also be given emphasis during the program period. Activities for the nation-wide improvement of the methods of data collection which were found adaptable through the pilot project already undertaken by the Bureau of Agricultural Economics in three provinces shall be conducted. Further improvements in data collection techniques in agriculture and natural resources will be made within the next four years. The program will include the following:

(1) Improvement in the accuracy of crop area estimates;

(2) Introduction of more objective methods of estimating crop yield and extent of damage to crop;

(3) Use of area sampling schemes; and

(4) A training program for agricultural statisticians.

Greater emphasis will be given to research in agricultural marketing and agricultural diversification. With the increasing commercialization of agriculture brought about by technological advances in production and marketing, more system-analysis types of research will be undertaken during the program period.

The research personnel and facilities of private universities and institutions will be mobilized to assist in undertaking these research projects together with the different government entities involved.

Funds for research, now available principally from the NSDB, the DANR, and private foundations, will be coordinated toward priority research areas that fit into the four-year program.

Table 7.2—PHYSICAL TARGETS OF PLANNED AGRICULTURAL PRODUCTION, FY 1972-75
(Thousand units)

	UNIT	BASE YEAR FY 1970[1]	ESTIMATED FY 1971	TARGET FY 1972	FY 1973	FY 1974	FY 1975	(PER CENT) AVERAGE GROWTH RATE
FOOD CROPS	MT							
Palay		5,233	5,343	5,853	6,301	6,633	6,982	6.1
Corn, white		1,823	1,919	2,035	2,155	2,280	2,411	5.8
Corn, yellow		185	153	257	279	302	325	8.2
Sorghum		3	10	30	69	97	133	70.0
Soybean		3	2	11	22	43	86	100.0
Vegetables[2]		1,650	1,624	1,850	1,970	2,098	2,234	6.5
Bananas & other fruits		1,641	1,735	1,866	1,989	2,120	2,260	6.6
FISH	MT	1,424	1,512	1,599	1,691	1,789	1,893	5.8
COMMERCIAL CROPS	MT							
Cocnut, copra		1,657	1,707	1,691	1,753	1,815	1,929	4.5
Coconut oil		205		400	460	529	608	15.0
Coconut, desiccated & others		70	66.	200	230	265	304	15.0
Sugar, centrifugal		1,926	1,938	2,176	2,286	2,335	2,367	3.8
Abaca, raw fiber		110	109	114	117	120	123	2.7
Abaca, cordage		12	12	14	14	15	15	3.1
Tobacco, native		39	42	46	50	55	60	9.7
FORESTRY (Logs)	Cubic Meter	10,785	11,005	11,225	11,449	11,678	11,912	2.0
LIVESTOCK AND POULTRY (Population)	Units							
Poultry		94,400	95,000	102,500	108,400	113,600	130,800	5.6
Hogs		10,300	11,100	12,400	14,000	15,600	17,500	12.0
Cattle		2,100	2,100	2,200	2,300	2,400	2,500	3.8
Carabaos		4,700	4,800	4,900	5,100	5,300	5,500	3.6
SLAUGHTERED (Dressed)) Weight, metric ton								
Poultry		88	89	100	107	112	121	6.7
Pork		374	391	423	456	493	532	8.0
Beef		36	37	39	40	44	47	6.8
Carabeef		89	91	95	98	112	120	8.3
EGGS (metric ton)		104	106	113	124	128	137	6.9

[1] 1970 figures for Livestock and Poultry are preliminary estimates, with the Inventory figures adjusted using BAEcon data and BAI estimates of number of animals in non-farms, and number of animals slaughtered outside the Greater Manila area.
[2] Including root crops, onion, ginger, irish potato and beans.

Table 7.3—ACTIVITY GOALS FOR THE LAND DISTRIBUTION PROGRAM
(Thousand units)

AGENCY PROJECT/ACTIVITY	UNIT OF MEASUREMENT	1972	1973	1974	1975
Bureau of Forestry (BF)					
(1) Land Classification	Hectare	2,418	2,351	2,374	1,799
Bureau of Soils (BS)					
(1) Soil Survey & Land Capability Classification	Hectare	2,418	2,351	2,374	1,799
Bureau of Mines (BM)					
(1) Geological Surveys	Hectare	1,100	1,140	1,140	1,180
(2) Mineral Land Surveys	Hectare	80	120	90	130
Bureau of Lands (BL)					
(1) Land Surveys					
(*a*) Public Land Surveys	Hectare	492	700	700	700
(*b*) Cadastral Surveys	Lot	243	333	333	333
(*c*) Sp. & Iso. Surveys	Lot	2	2	2	2
(*d*) Verification of Surveys	Lot	155	200	200	200
(*e*) Geodetic Control Surveys	Kilometer	1	1	1	1
(*f*) Maps Reconstruction	Unit	53	53	53	53
(2) Land Titling					
(*a*) Land Patent	Lot	34	35	40	50
(*b*) Field Investigation	Investigation	275	300	300	300
(3) Land Survey/Titling					
(*a*) Patent Issuance lot to be patented		34	35	40	50
(*b*) Field Investigation to be made		275	300	300	300

Table 7.4—ACTIVITY GOALS FOR THE CONSERVATION OF THE NATURAL REOURCES PROGRAM
(In thousand units)

AGENCY PROJECT/ACTIVITY	UNIT	1972	1973	1974	1975
Bureau of Forestry/Reforestation Administration (BF/RA)					
(1) Sustained Yield Management					
(*a*) Selective logging Tree marking	Hectare	137.3	144.2	151.4	158.9
Residual inventory	Hectare	126.4	132.6	139.1	146.0
Timber stand improvement	Hectare	107.9	113.3	119.0	124.9
(*b*) Forest Resources Inventory					
Extensive	Hectare	2,285.6	—	—	—
Intensive	Hectare	480.0	600.0	600.0	600.0
(2) Forest Range and Watershed Management					
(*a*) Grass cover improvement	Hectare	.6	2.9	1.0	5.8
(*b*) Wattling	Hectare	.2	.6	.6	.1
(*c*) Stream channel improvement	Cubic Meter	20.0	49.7	12.1	14.0
(*d*) Check dams construction	Cubic Meter	60.0	65.3	30.0	8.5
(*e*) Roadblock stabilization	Cubic Meter	20.0	36.7	120.1	10.0
(*f*) Improvement of upland agriculture	Hectare	.2	.2	.1	1.2
(3) Reforestation	Hectare	43.6	48.6	53.6	58.6
(*a*) Critical watershed	Hectare	20.0	22.5	25.0	27.5
(*b*) Kaingin areas	Hectare	10.6	13.1	15.6	18.1
(*c*) Areas destroyed in logging	Hectare	13.0	13.0	13.0	13.0
(4) Forest Protection					
(*a*) Patrol	Hectare	14,673.0	13,500.0	13,000.0	13,000.0
(*b*) Fire prevention control	Hectare	250.0	250.0	250.0	250.0
(*c*) Construction of protection and management road	Kilometer	—	.1	.1	—
(*d*) Construction of protection trails	Kilometer	.1	.2	.2	.1
Parks and Wildlife Management					
Parks and Wildlife Office (PWO)					
(*a*) National Park areas to be improved and maintained	Hectare	222.0	222.0	222.0	222.0
(*b*) Wildlife refuge sanctuaries to be maintained	Hectare	282.0	282.0	282.0	282.0
Bureau of Soils (BS)					
(1) Land Use Planning (Topographic survey, Land Capability survey, and Land use survey)	Hectare	14.0	22.0	30.0	38.0
(2) Mechanical erosion Control (Grasses waterways and Contour paddies)	Hectare	7.1	15.1	23.0	31.0
(3) Water Erosion (Gully control Irrigation and Drainage)	Hectare	11.8	20.3	28.0	36.0
(4) Vegetative Erosion Control (Filed stripping, cover cropping, contour strip-cropping, crop rotation and green manuring)	Hectare	4.7	13.0	21.0	29.0
Philippine Fisheries Commission (PFC)					
(1) Campaign against illegal fishing	Sq. Kilometer	160.0	160.0	160.0	160.0

Table 7.5—GENERAL FUND REQUIREMENTS FOR DEVELOPMENT ACTION PROGRAMS
(In thousand pesos)

PROGRAM/PROJECT/ACTIVITY	IMPLEMENTING AGENCY	1972	1973	1974	1975
A. EXPANDED FOOD PRODUCTION PROGRAM		58,758	70,083	79,593	89,842
1) Food Crops					
a) Rice & Corn Research	BPI/UPCA	1,694	1,949	2,241	2,577
b) Soil Analysis	BS	755	1,125	1,500	1,875
c) Production of Seeds	BPI	721	793	872	959
d) Control of Pest and Diseases	BPI	2,777	3,054	3,360	3,696
e) Demonstration of Improved farm Practices	APC	1,866	2,200	2,400	2,700
f) Crop Production	BPI	4,393	5,051	5,809	6,681
g) Agricultural Research	BPI	2,872	3,303	3,798	4,368
h) Soil Research, Fertilization and Analysis	BS	1,935	2,516	3,019	3,622
i) Procurement & Distribution of Fertilizers and Certified Seeds	BPI/ACA	2,516	2,893	3,327	3,827
j) Agricultural Guarantee and Loan Fund	OS/DANR	4,500	5,000	5,000	5,000
k) Special Projects	NFAC/OS	1,537	2,000	2,000	2,000
2) Meat & Poultry Products					
a) Livestock & Poultry Improvement and BAI Development	BAI	9,057	9,987	11,004	12,097
b) Immunization, Quarantine & Other Control Services	BAI	6,810	7,510	8,274	9,096
c) Research	BAI	1,976	2,179	2,401	2,639
3) Fish					
a) Marine & Inland Fisheries Development and Research	PFC	9,433	13,223	16,943	20,663
4) Foodgrains					
a) Production of Foodgrains	BPI	2,000	2,300	2,645	3,042
5) Economic Statistics & Marketing Info.					
a) Improvement of Statistics Collection, Economic Research & Marketing News Services	BAEcon	2,196	3,000	3,000	3,000
6) Food Program Coordination					
a) Coordination Activities	NFAC/OS	1,720	2,000	2,000	2,000
B. DEVELOPMENT OF EXPORT PRODUCTS PROGRAM		21,708	24,661	26,079	27,466
1) Forest Products					
a) Scaling & Lumber grading	BF	5,178	6,709	6,852	7,002
2) Coconut Production and Rehabilitation	BPI	2,303	2,648	3,045	3,502
3) Abaca and Other Fibers					
a) Abaca & Other Fibers Development	AOFDB	2,729	3,212	3,356	3,430

PROGRAM/PROJECT/ACTIVITY	IMPLEMENTING AGENCY	1972	1973	1974	1975
4) Cigar filler and wrapper leaf tobacco production					
a) Intensified Research & Extension Program	PTA	855	855	855	855
b) Marketing & Price Stabilization Program	PTA	7,695	7,695	7,695	7,695
5) Fishery Products					
a) Marine Fishing Development (Research)	PFC	227	305	391	477
6) Banana and Others					
a) Vegetable & Fruit Production	BPI	2,721	3,237	3,885	4,505
C. LAND DISTRIBUTION PROGRAM		50,639	67,768	79,176	68,132
1. Land-Use Classification					
a) Land Classification	BF	6,758	8,225	8,315	6,300
b) Soil Survey & Classification	BS	1,714	2,278	2,674	3,140
c) Geological & Mineral Land Surveys	BM	3,442	3,620	3,670	3,660
2) Land Survey & Titling					
a) Land Surveys	BL	33,006	47,375	47,595	47,825
b) Patent Issue	BL	5,719	6,270	6,922	7,207
D. CONSERVATION OF NATURAL RESOURCES		31,654	38,554	42,637	42,985
1) Reforestation					
a) Plantation Management	RA	6,430	6,800	7,200	7,660
2) Forest Production					
a) Watershed Protection and Improvements	BF	9,053	13,091	15,254	13,562
b) Forest Research	BF	1,402	1,148	1,248	1,328
3) Forest Land-Use & Management					
a) Forest Management and Land Use	BF	9,618	10,980	11,500	12,100
4) Parks & Wildlife Conservation and Tourism					
Promotion of National Parks					
a) Conservation of Wildlife	PWO	689	810	850	890
b) Maintenance of National Parks	PWO	1,880	2,430	2,550	2,670
5) Conservation of Fisheries					
a) Fisheries conservation	PFC	1,406	1,920	2,460	3,000
6) Control of Erosion					
a) Erosion control	BS	1,176	1,375	1,575	1,775
GRAND TOTAL[1]		162,759	201,066	217,485	228,425

[1] Excludes expenses for general administration.

Table 7.6—SPECIAL AND OTHER FUNDS
(In thousand pesos)

AGENCY PROJECTS/ACTIVITY	1972	1973	1974	1975
A. Bureau of Plant Industry (BPI)	1,378	1,891	2,444	2,998
1) Improvement of Agricultural crops				
a) Agricultural Research	733	903	1,136	1,369
b) Plant Propagation and distribution	645	988	1,308	1,629
B. Bureau of Animal Industry (BAI)	3,418	3,814	4,108	4,402
1) Promotion and Development of Animal Industry				
a) Livestock and Poultry Improvement & Development	1,412	1,681	1,881	2.080
b) Immunization, Quarantine & Other Control Services	1,434	1,480	1,514	1,548
c) Research	572	653	713	774
C. Bureau of Soils (BS)	30	38	46	55
1) Soil Survey and Conversation:				
a) Soil Survey and Classification	12	17	20	24
b) Erosion Control	13	16	21	26
c) Laboratory Services	5	5	5	5
D. Bureau of Lands (BL)	3,007	3,904	4,669	5,434
1) Land Surveys				
a) Public Land Surveys	1,154	1,524	1,858	2,192
b) Cadastral Surveys	671	829	977	1,126
c) Verification of Maps & Plans	314	429	517	606
d) Reconstruction of Maps & Plans	122	165	197	229
2) Management & Disposition of Lands				
a) Land Patent	236	305	357	408
b) Management and Other Disposition of Acquired Lands	22	30	36	42
c) Field Investigation	487	623	727	831
E. Reforestation Administration (RA)	10,965	11,500	11,975	12,502
1) Reforestation and Afforestation				
a) Plantation Management	10,022	10,500	10,925	11,302
b) Reforestation Research	943	1,000	1,050	1,200
GRAND TOTAL	18,797	21,148	23,243	25,391
TOTAL FOR FOUR YEARS			80,575	

Table 7.7—PROJECTED LEASEHOLD ADMINISTRATIVE EXPENTIDURES, FY 1971-74
(In thousand pesos)

AGENCY	1971	1972	1973	1974	TOTAL
Land Authority	6,530	8,559	10,332	11,546	37,007
Agricultural Credit Administration	8,348	10,982	13,329	14,944	47,602
Agricultural Productivity Commission	20,941	27,282	32,936	36,739	117,897
Office of the Agrarian Counsel	6,691	8,627	10,353	11,522	37,193
TOTAL	42,550	55,450	66,950	74,750	239,700

Table 7.8—PROJECTED CREDIT REQUIREMENTS, ACCORDING TO TYPES OF LOAN
(In thousand pesos)

TYPE OF LOAN	FY 1971	FY 1972	FY 1973	FY 1974	TOTAL
Production	93,818	114,600	145,300	158,800	513,518
Commodity/Marketing	16,684	20,000	25,300	27,600	59,584
Facility	8,248	9,900	12,500	13,600	44,248
Operating Capital	1,250	1,500	1,900	2,000	6,650
TOTAL	120,000	146,000	185,000	202,000	653,000

CHAPTER 8
Industry

The industrial sector covers the areas of manufacturing, the processing segment of mining, and other related activities such as construction. As a limited sphere of activity, it may be confined to some part of mining and the whole of the manufacturing sector.

The Four-Year Plan calls for a much faster expansion of industry in the next few years. From a percentage share of about 19.0 per cent of net domestic product, manufacturing is expected to contribute 20.9 per cent by FY 1975.

By assigning half of the total value added of the mining sector to processing, the share of processed mineral industries will also rise from about 2.4 per cent of the net domestic product in FY 1971 to 3.7 per cent in FY 1975.

Adding further the activities emanating from construction, the total volume of industry to total net domestic product rises from 24.4 per cent to about 27.6 per cent of the net domestic product. This may be seen from the following:

NET DOMESTIC PRODUCT ORIGINATING IN SECTORS AS PER CENT OF TOTAL	FY 1972	FY 1975
Processed mining	2.4	3.7
Manufacturing	19.0	20.9
Construction	3.0	3.0
	24.4	27.6

1. GOVERNMENT ROLE

Industrial development hinges largely on the participation of the private sector. The government merely provides the climate most healthy for optimum industrial growth. It will not invest in any industrial venture but will provide needed development finance to the fullest possible extent. Government chooses to interfere only in directing the natural flow of resources towards the promotion of vital industrial projects.

Public outlays in the construction of necessary infrastructures affecting transportation and communication, the extension of adequate credit facilities, and the provision of investment incentives for both local and foreign investors are all examples of government functions. They constitute part of the program to accelerate industrial development relative to the other sectors of the economy.

2. PRESENT SITUATION

A sweeping description of the present situation in manufacturing as evidenced from its history reveals, firstly, that most activities previously promoted were import dependent especially in raw material inputs. Estimates on the import content of different industrial products indicate the extent of this dependence. (See Table 5.7 in Chapter 5.) Chances are that this import-heavy structure will remain for sometime. However, as long as such import-dependent industries are able to generate incremental foreign exchange or be effective "net savers" of foreign exchange, then they may be economically justified. But if net foreign exchange earnings and savings are either too small or zero, then these activities only waste resources.

The second observation is that existing activities also happen to be fairly unsophisticated versions of more intricate manufacturing processes not yet locally established. Third, the protectionism, whether in the form of foreign exchange controls, import controls or tariff protection, that has affected manufacturing had favored final consumer industries as against intermediate-supplying and/or the basic-processing industries. Tariff protection which partially replaced direct controls in the 1960's created a similar bias in favor of light types of manufactures, thereby cramping development of full-scale backward integration in manufacturing industries.

As a result of earlier policies which cheapened foreign exchange and overpriced labor, the attractiveness of capital-intensive industries somehow relegated the development of relatively labor-intensive industries to the background. A second effect has been the predilection towards big-scale finish-product enterprises as against fairly small- and medium-scale types of activities. The above developments had led to some of the problems presently encountered in the manufacturing sector.

Until recently, new avenues of import-substitution have been slow in coming even as government had continually pointed them out. Worse yet, exports from the new industrial sector moved very slowly. Such failures were deepseated symptoms of misstructured incentives, as well as of policies, affecting the industrial sector.

Other symptoms showed in the industrial dichotomy which has developed from the overprotection of some industries and the underprotection of others. In like manner, pricing policies which cheapened selected consumer items, as in the former practice of reselling imported large canned goods in the market at cheaper than acquisition price, have prevented the orderly growth of wage-goods industries that reduce the costs of modernization, given rising per capita income. Admitedly, of course, the undervaluation of foreign exchange had its share of the responsibility.

A. Over-Capacity and other Problems

Consequently, excess capacity built up over the years. This reflects the failure of government to encourage domestic industries that feed raw materials into the established finishline industries. By virtue of such under-capacity utilization, inefficient and wasteful use of certain scarce resources has ensued. The same policies also amassed wealth and power for the luckier industries that were able to generate income and capital formation under conditions of underpriced resources. Finally, they only increased the cost of administration by opening up opportunities for corruption and smuggling.

Many of the reforms cited in Chapter 2 of this Plan are relevant to the formation of more appropriate incentives for the industrial sector. They call for a drastic reconsideration of many of the traditional viewpoints that have persisted in the Philippines concerning industrial policy.

Therefore, with the adoption of the floating rate in 1970, many tacit problems affecting local industry became accentuated. The effects have been harsh on certain industries owing primarily to their basic market orientation. Add to the latter the adamant fixation to a setup where foreign exchange acquisition has been obtained under drastically undervalued conditions. But for those industries that have tolerably thrived on a healthy pattern of industrial import substitution and resource-based export-expansion, the floating rate had afforded quite generous rewards.

It must be stressed that the adoption of a realistic exchange rate policy is a major and powerful step towards restructuring the orientation of many of these industries. That such a policy needs to be complemented by fiscal, monetary, and administrative policies relating to the use of foreign exchange earnings cannot be denied. Nevertheless, recognition of the need to detract the orientation of many domestically-catering industries towards foreign outlets is very important. Such steps are now being coursed through certain measures in the export incentives program as well as through the implementation of investment incentives.

In this connection, the concept of small- and medium-scale industries becomes rather appropriate. While the description often recalls the NACIDA to mind, many ventures of such scale do not fall under the cottage-industry category. Nevertheless, they have to be encouraged inasmuch as they provide functional service to large-scale businesses by undertaking intermediate processes much more economically than big enterprises would. The importance of small industries is best appreciated from the effectiveness of a dynamic interaction between big and small industries; this is most obvious in the area of subcontracting. In Japan, for example, it is common for big name companies to relegate the assembly of sub-components in the final brand item to smaller business entities.

B. Promotion as Against Protection: Answer to Over-capacity

Promotion and protection are key words that govern the industrial program. Protection is necessary, but, if carried too far, it can lead to various problems of economic inefficiency and waste. What is needed is the proper inducement for industries to move into desired priorities and remain viable while being subjected to the vicissitudes of market risks. This way industries are able to be competitive in relation not only to those operating within the country but also in relation to export potentials.

If these key words guide the industrial promotion program, there will be very little problem of huge excess capacities, because industries will be established under a healthy climate of economic competition. This fosters a more orderly import-substitution scheme as well as a more rational program of export diversification.

C. Manufacturing Picture

The estimated growth rate of manufacturing production in FY 1971 was 5.1 per cent over the previous year's output, measured in 1967 prices. This is an improvement of about .4 per cent from its rate of increase achieved in FY 1970.

In 1948, almost three-fourths of total manufacturing output consisted of food, beverages, and tobacco, with the rest coming from clothing, household items and other manufactures (see Table 8.1); by the early sixties, this share of food, beverages and tobacco dropped to one-third of total production. Meanwhile, "miscellaneous manufactures" which includes such producer and

durable goods as metals, fuels, appliances, wood and other products, emerged as a dominant sector, contributing almost one-half of total manufactures. In 1968, the structural composition of the manufacturing sector approximated that of 1961.

Table 8.1—VALUE OF PRODUCTS SOLD
(Per cent distribution)

	1948	1961	1968
Food and Beverage,including tobacco products	73.11	32.11	34.8
Clothing	9.57	10.62	9.6
Household Items	3.04	11.40	8.7
Miscellaneous Manufactures	14.28	45.78	46.9
	100.00	100.00	100.00

The change in output mix from a relatively high food-beverages-and-tobacco content was a consequence of the structure that catered primarily to the domestic market but depended heavily on imported raw materials and equipment. Import dependence is quantitatively presented in Table 5.7 of Chapter 5.

The shift in industrial composition between 1958 and 1968 betrays a gradual movement towards intermediate and processing activities. The consumption-goods sector, particularly the food-beverages-and-tobacco component, was continually losing its traditional foothold. This is evident from Table 8.2 (see also Figure 8.1).

Using national income accounts, percentage-share declines were most pronounced in the activities of food-beverages-and-tobacco. Its share sunk down from almost one-third of total output to around one-sixth within that decade. Other consumption goods like footwear, apparel, furniture, fixtures, coal and petroleum products, and leather goods, underwent similar downward trends in share over the ten-year period. The shrinking of the corresponding bars on the graph denotes this quite vividly.

On the other hand, performance in the intermediate processing sector that included, among other things, wood and cork, textiles, concrete products, cement, paper, rubber, chemicals, mineral and metal products, machinery, glasswares, electrical machinery, transport equipment and other miscellaneous manufactures, appeared quite impressive. A number of new products not formerly manufactured in the Philippines prior to 1960 have since been processed locally. Marked percentage increases occurred particularly in the areas of wood, cork, cement, chemical, machine, and base metal, manufactures.

Table 8.2—PERCENTAGE DISTRIBUTION—VALUE ADDED FOR MANUFACTURING BY INDUSTRY GROUP, AT 1967 PRICES

CODE NO.	INDUSTRY GROUP	1958	1962	1968
20	Food	33.5	33.8	17.6
21	Beverage	5.8	6.2	13.1
22	Tobacco	5.5	4.9	4.3
23	Textiles	3.7	4.1	6.0
24	Footwear	10.5	7.9	3.7
25	Wood & Cork	4.4	3.5	5.0
26	Furniture	2.0	2.2	1.8
27	Paper	1.2	1.4	4.5
28	Printing	2.9	3.7	2.3
29	Leather	0.5	0.3	0.1
30	Rubber	2.0	2.3	1.4
31	Chemicals	6.6	7.1	6.7
33	Non--metallic minerals	2.7	3.4	6.3
34)	Basic metals)			
35)	Metal products)	4.7	5.9	7.6
36	Machinery	3.1	1.4	4.1
37	Electrical machine	2.1	3.3	3.1
38	Transport	3.0	2.5	1.0
32)	Petroleum &)	5.8	6.1	10.8
39)	coal)			
)	Miscellaneous)			
TOTAL		100.0	100.0	100.0

Source: National income accounts, Office of Statistical Coordination and Standards of the National Economic Council.

Although the manufacturing sector is still dominated by final processing and packaging activities, the decade of the sixties did witness the encroachment of a number of intermediate industries.

Durable goods production more than doubled between 1960 and 1969 at a growth rate much higher than that of non-durable goods (see Table 8.3).

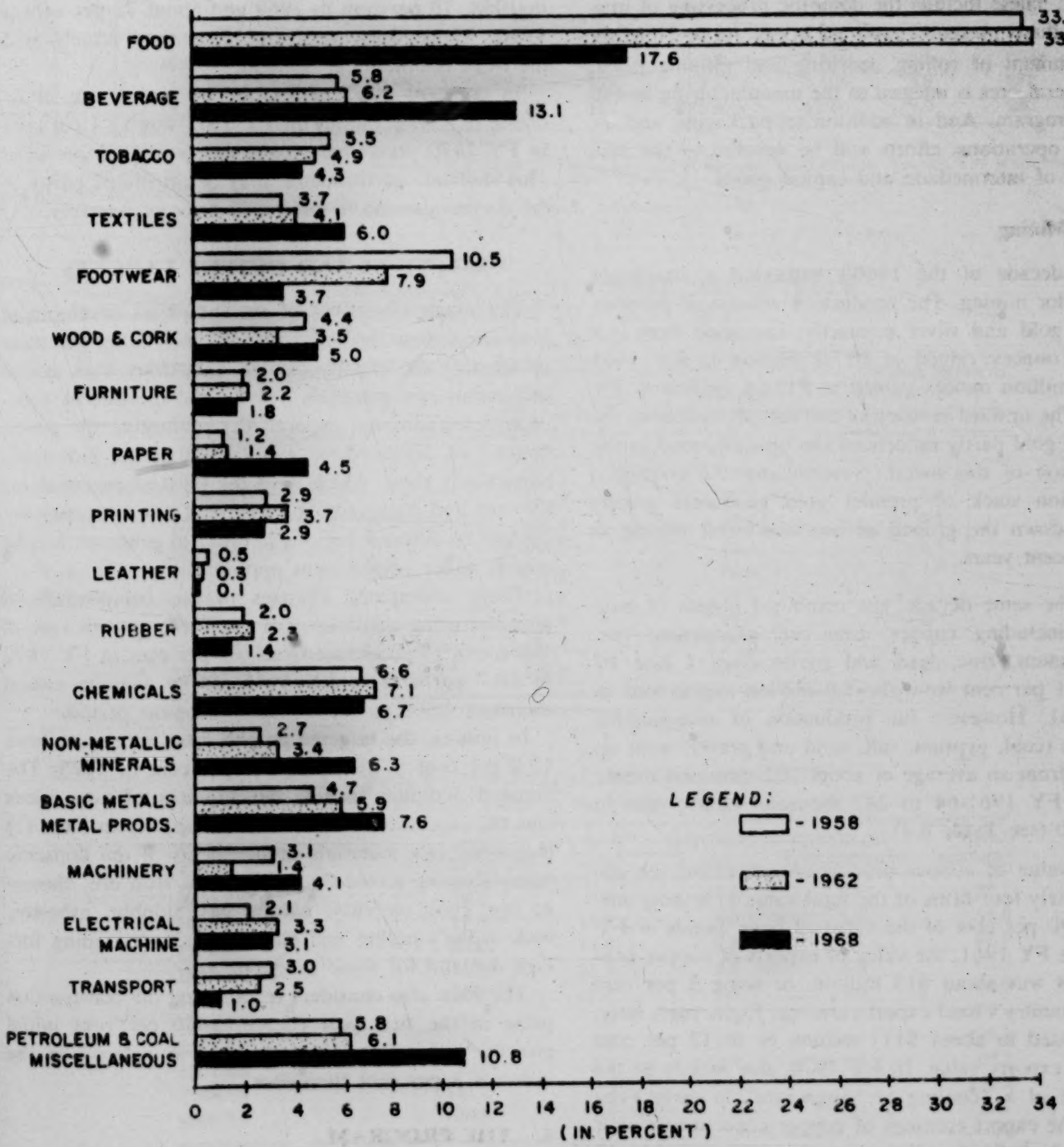
Table 8.3—INDICES OF THE PHYSICAL VOLUME OF MANUFACTURING PRODUCTION
(1955 = 100)

	NON-DURABLE	DURABLE	ALL
1962	165.6	189.3	169.7
1963	174.9	207.5	180.5
1964	186.8	237.3	195.5
1965	193.3	237.4	200.9
1966	211.6	251.9	218.6
1967	217.7	269.1	226.6
1968	237.9	294.7	247.7
1969	246.0	305.1	256.3
1970 [1]	247.0	284.3	254.3

[1] As of June 1970
Source: Central Bank of the Philippines.

Figure 8.1

PERCENTAGE DISTRIBUTION OF VALUE-ADDED FOR MANUFACTURING BY INDUSTRY GROUP AT 1967 PRICES



The shift in manufacturing activities to immediate and basic stages of production may be expected to accelerate as industrial incentives become fully effective. This transition is already evident in the composition of the projects which have been registered with the Board of Investments. Backward integration in manufacturing activities involving the processing of indigenous raw materials and the development of industries with bright export potentials is receiving top priority. These include the domestic processing of mineral products presently exported in raw form. Thus, the establishment of rolling, smelting and refining plants for mineral ores is integral to the manufacturing investment program. And in addition to packaging and assembly operations, efforts will be devoted to the production of intermediate and capital goods.

D. Mining

The decade of the 1960's witnessed a significant growth for mining. The production volume of precious metals, gold and silver primarily, increased from 1.5 million ounces valued at ₱57.1 million in FY 1961 to 2.2 million ounces valued at ₱134.4 million in FY 1975. The upward revision of the subsidy ceiling in the price of gold partly influenced the upward trend in the production of this metal. Nevertheless, the continued production slack of premier gold producers greatly slowed down the growth of precious-metal mining in more recent years.

For the same decade, the combined output of base metals including copper, iron ore, manganese ore, molybdenum, zinc, lead and pyrite cinders rose by about 31 per cent from the 1.9 million metric tons in FY 1961. However, the production of non-metallic minerals (coal, gypsum, salt, sand and gravel) went up slightly from an average of about 262 thousand metric tons in FY 1961-64 to 282 thousand metric tons in FY 1970 (see Table 8.4).

The value of copper production accounted for approximately four-fifths of the total value of mining output or 90 per cent of the value of base metals in FY 1970. In FY 1961, the value of exports of copper concentrates was about $15 million, or some 3 per cent of the country's total export earnings. Eight years later, it increased to about $111 million or to 13 per cent of total exports value. In FY 1970, due mainly to the adoption of a "floating exchange rate" in early February, the export earnings of copper concentrates shot up to a high $166 million, accounting for roughly 19 per cent of the total export proceeds during the year. (See Tables 8.5 and 8.6.)

Production of iron ore rose by 15.4 per cent in 1969 and by 12.4 per cent in 1970. The upward trend of iron ore output in recent periods was attributed to higher export prices and increased imports of iron beach sand by Japan. Likewise, due to the strong demand for stockpiling from the United States, chromite production increased from an incremental rate of 4.6 per cent in 1968 to about 17 per cent in 1970. In the case of manganese ore, output declined by 18 per cent in 1968, 70 per cent in 1969 and about 72 per cent in 1970. These decreases were associated largely with the weak international demand.

In constant 1967 prices, the estimated rate of increase in mining output for FY 1971 was 13.4 per cent. In FY 1970, its actual growth rate was 18.5 per cent. This shortfall performance may be attributed partly to the declining trend in the world price of copper.

3. OBJECTIVES AND OUTPUT TARGETS

The major objectives of the industrial development plan encompass the following: (1) alleviating the trade imbalance via export-oriented industries that utilize indigenous raw materials heavily and the further processing of traditional exports; (2) promoting the development of intermediate and capital goods industries, particularly those which have the greatest potential for forward and backward linkages; and (3) dispersing industries to different regions in order to generate, among others, wider employment opportunities.

These anticipated changes in the composition of manufacturing activities will allow the growth rate of this sector to accelerate from 6.3 per cent in FY 1972 to 10.0 per cent in FY 1975, or an average annual increase of 9.0 per cent in the four-year period.

In mining, the targeted growth rates accelerate from 17.0 per cent in 1972 to 23.5 per cent in 1975. The planned activities include development of new mines and the expansion of the existing capacity to meet (1) increasing raw materials requirements of the domestic manufacturing sector (for copper ore, iron ore, chromite ore, coal, mercury, natural gas, sulphur, asbestos, rock aspha't perlite and clay) and (2) expanding foreign demand for these products.

The Plan also considers reactivating the construction pulse in the first year (hence, a 30 per cent initial growth) and maintaining a consistent uptrend in the order of 8 per cent thereafter.

4. THE PROGRAM

In effect, for both the manufacturing and mining sectors, the four-year strategy will focus on (a) the

Table 8.4—MINERAL PRODUCTION, FY 1960-61 to FY 1969-70

FISCAL YEAR	PRECIOUS METALS [1] VOLUME 1000 OZ.	PRECIOUS METALS [1] VALUE (MIL P)	BASE METALS [2] VOLUME 1000 MT	BASE METALS [2] VALUE (MIL P)	COPPER VOLUME 1000 MT	COPPER VALUE (MIL P)	QUICKSILVER [3] VOLUME FLASK	QUICKSILVER [3] VALUE (MIL P)	NON METALLICS [4] VOLUME 1000 MT	NON METALLICS [4] VALUE (MIL P)
1960-61	1,523	57.1	1,822	62.6	47	61.0	3,181	1.5	312	50.4
1961-62 ...	1,163	71.2	1,996	79.2	55	103.4	3,108	1.8	269	57.0
1962-63 ...	1,031	71.5	1,028	84.3	59	127.4	2,543	1.5	288	49.8
1963-64 ...	1,272	84.8	1,993	82.2	63	142.4	2,710	1.8	218	66.1
1964-65 ...	1,378	87.4	1,847	83.4	59	155.8	2,337	4.1	344	59.5
1965-66 ...	1,401	87.7	2,115	106.3	68	252.1	2,343	4.2	144	74.3
1966-67 ...	1,853	106.9	2,078	83.4	82	103.4	2,561	4.6	262	75.7
1967-68 ...	2,001	115.7	1,796	83.4	92	411.4	3,124	6.1	263	98.0
1968-69 ...	2,053	124.6	2,071	93.1	118	507.3	3,505	6.9	252	98.2
1969-70 ...	2,245	134.4	2,298	115.0	151	933.9	3,910	8.6	282	119.1

[1] Includes gold, silver, platinum, palladium
[2] Includes iron ore, chromite ore, pyrite cinders, manganese ore, zinc, molybdenum, lead except quicksilver and copper
[3] Quicksilver or mercury
[4] Includes coal, rock asphalt, gypsum (natural and synthetic), sand and gravel

Table 8.5—EXPORTS OF COPPER CONCENTRATE RELATIVE TO ALL EXPORTS
(f.o.b. value in million U.S. dollars)

FISCAL YEAR	ALL EXPORTS	COPPER CONCENTRATE EXPORTS	COPPER EXPORTS AS OF ALL EXPORTS
1960-61	530.0	14.8	2.8
1961-62	527.8	28.0	5.3
1962,63	641.6	34.9	5.4
1963-64	734.6	37.7	5.1
1964-65	755.2	40.3	5.3
1965-66	798.2	60.5	7.6
1966-67	824.8	74.7	9.1
1967-68	834.9	82.0	9.8
1968-69	851.4	111.0	13.0
1969-70	876.9	166.2	19.0

Source: Central Bank of the Philippines

Table 8.6—PRINCIPAL MINERAL EXPORTS
(f.o.b. value in million U.S. dollars)

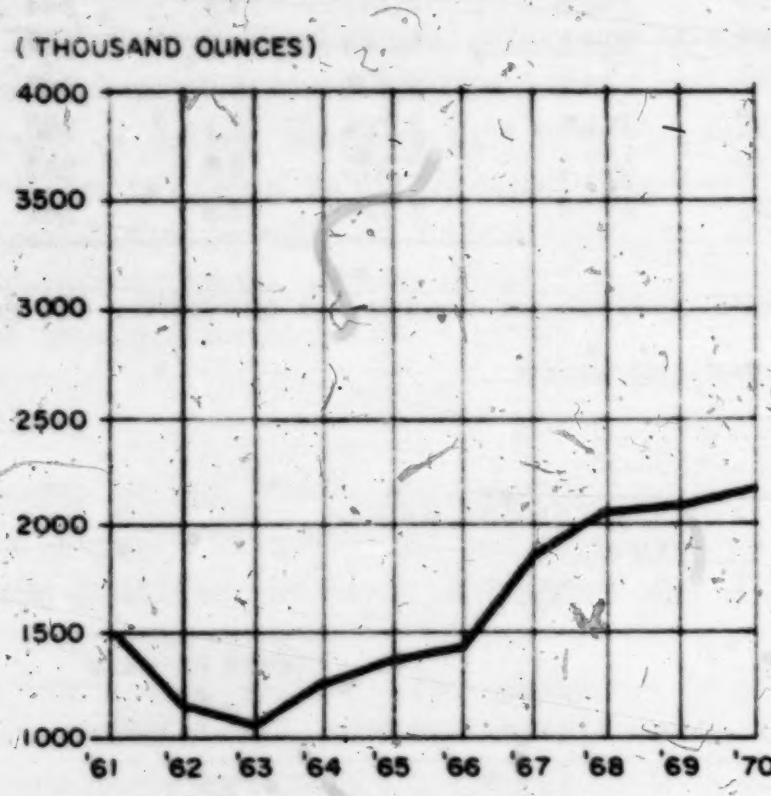
FISCAL YEAR	COPPER CONCENTRATES	IRON ORE	CHROMITE ORE	CHROMIUM CONCENTRATE	TOTAL EXPORTS
1960-61	14.8	8.4	10.3	3.6	37.1
1961-62	28.0	10.0	8.0	2.6	48.6
1962-63	34.9	11.6	8.3	3.3	56.1
1963-64	37.7	11.3	8.6	3.3	60.6
1964-65	40.3	10.3	8.3	4.3	63.2
1965-66	60.5	7.0	7.2	1.8	76.5
1966-67	74.7	5.2	7.3	1.9	89.1
1967-68	82.0	3.7	4.7	2.3	92.7
1968-69	111.0	7.1	3.2	3.3	124.6
1969-70	166.2	7.3	4.8	1.8	180.1

Source: Central Bank of the Philippines

Figure 8.2

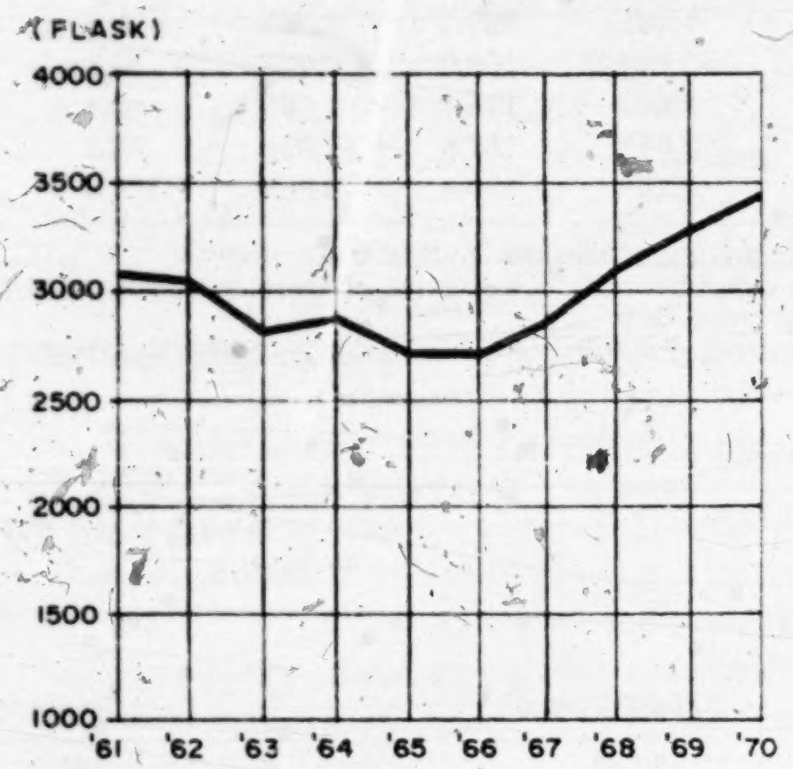
VOLUME OF PRODUCTION OF PRECIOUS METALS, QUICKSILVER AND MINERALS FY 1960-61 TO FY 1969-70

A. VOLUME OF PRODUCTION OF PRECIOUS METALS FY 1960-61 TO FY 1969-70



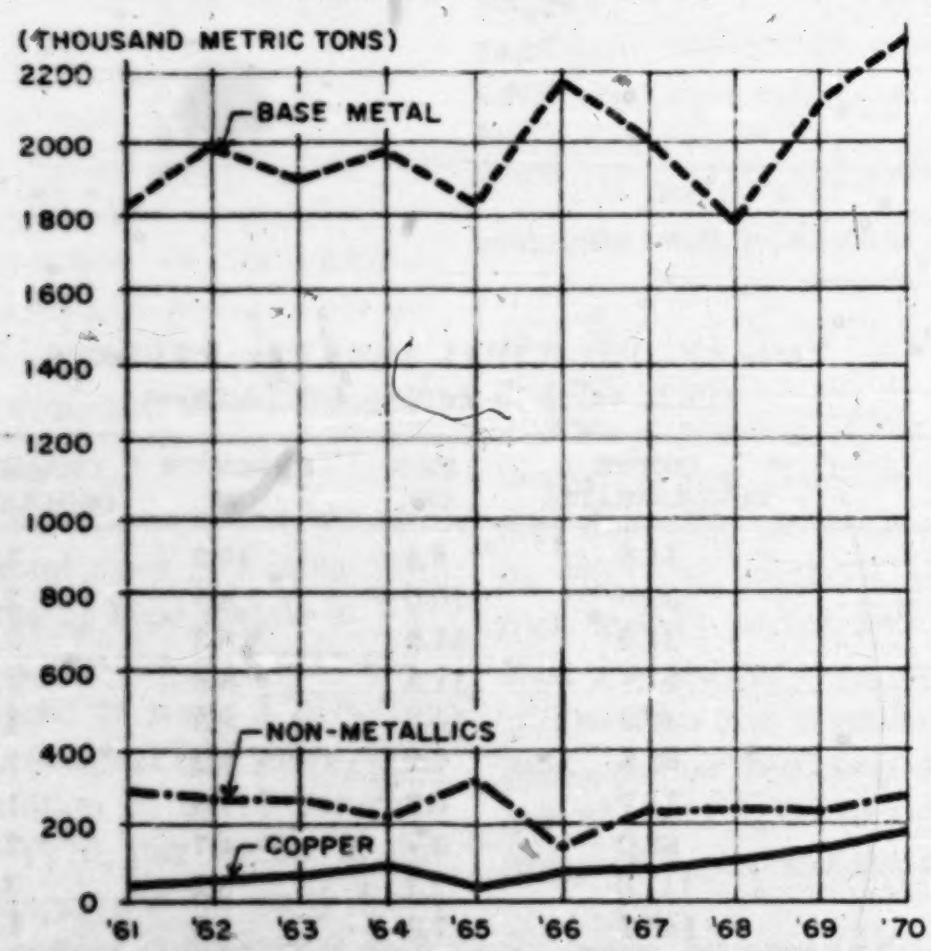
NOTE: PRECIOUS METALS INCLUDE GOLD, SILVER, PLATINUM, PALLADIUM.

B. VOLUME OF PRODUCTION OF QUICKSILVER FY 1960-61 TO FY 1969-70



NOTE: QUICKSILVER OR MERCURY.

C. VOLUME OF MINERAL PRODUCTION FY 1960-61 TO FY 1969-70



NOTE: BASE METALS INCLUDE IRON ORE, ZINC, CHROMITE ORE, PYRITE CINDERS MANGANESE ORE, MOLYBDENUM, LEAD EXCEPT QUICKSILVER AND COPPER; NON-METALLICS INCLUDE COAL, ROCK ASPHALT, GYPSUM (NATURAL AND SYNTHETIC), SAND AND GRAVEL.

development of export-oriented and import-substituting industries, as well as the effective utilization of existing capacities; (b) regional trade arrangements for those plants which are not only capital-intensive but also require scales of production larger than the domestic market needs; and (c) the regional dispersal of industries.

A. BOI Investment Priorities Plans

Incentives to industry have long been one of the main instruments by which the Philippine Government has attempted to direct the growth of manufacturing. The lessons learned from this experience in the application of incentives have been utilized in the formation of the Board of Investments (BOI).

The main activities of BOI concern the formulation of an Annual Investment Priorities Plan (IPP) and the evaluation of applicants for registration as preferred enterprises. The IPP is a listing of the types of industrial activities eligible for the special incentives offered. These may be pioneer or non-pioneer activities. A pioneer activity is a production process which has not been commercialized in the Philippines, although already established in other countries. In this area, varying degrees of incentives are open with export-activities receiving the most attractive terms.

The fiscal incentives available under the Investment Incentives Act to foreign-controlled preferred pioneer corporations come in the forms of:

(a) Deduction of organizational and pre-operating expenses;

(b) Accelerated depreciation;

(c) Net operating loss carry-over;

(d) Tax exemption on imported capital equipment;

(e) Tax credit on domestic capital equipment to user and manufacturer;

(f) Tax credit for withholding tax on interest;

(g) Employment of foreign nationals;

(h) Deduction for expansion of reinvestments;

(i) Anti-dumping protection;

(j) Protection from government competition;

(k) Exemption from all taxes under the Internal Revenue Code, except income tax on a gradually diminishing percentage from the date of registration up to December 1981;

(l) Post-operative tariff protection; and

(m) For export-oriented industries, double deduction of promotional expenses; double deduction of shipping costs on Philippine vessels and/or 150 per cent of shipping cost on foreign vessels, special tax credit on raw materials.

All the incentives mentioned above, except (k) and (l), are available to preferred Filipino non-pioneer enterprises.

Enterprises owned and controlled by American nationals engaged in non-pioneer areas, while entitled to non-tax benefits, cannot avail themselves of the tax incentives granted under this Act. Finally, other foreigners are temporarily prohibited from engaging beyond 40 per cent equity participation in non-pioneer areas. However, all foreign enterprises which are already engaged in such activities may continue to do so.

(1) Previous Plans: First, Second and Third Investment Priorities

The Government's involvement in the industrial program centers on the identification of economic areas where investments should be channeled, which is supplemented with incentives designed for both domestic and foreign capital.

To this end, the Board of Investment (BOI) has been drawing up an Investment Priorities Plan (IPP) every year since 1968. The first IPP contained a list of preferred industrial ventures, 19 of them classified as pioneer industries. The second Plan retained 54 of the original listing and added 39 new ones. The third IPP featured 88 industries comprising 21 new areas and 67 industries lifted from the previous plans.

The concept of integration in industries like food products, wood products, basic metals and chemicals was first introduced in the second IPP. Emphasis lay on the utilization of indigenous raw materials, such as minerals and forest products. Schedule A stressed agrindustrial activities; Schedule B listed mineral processing; and Schedule C encouraged the production of intermediate products such as metal products and chemicals like phtalic anhydride, nylon, polstrene, and polyvinyl alcohol. The established industries not included in the three schedules mentioned above were given incentives to export their products.

The list of industrial projects registered with the BOI until December 31, 1970 is shown in Table 8.7. The 199 approved projects consisted of 60 pioneer and 139 non-pioneer industries.

The registered projects involved a total investment cost of ₱3.044 billion. Seventy-six per cent (₱2.317 billion) represented fixed capital cost and the remaining ₱0.727 billion represented working capital and other expenses.

Table 8.7—FOURTH INVESTMENT PRIORITIES PLAN OF THE BOI, DEMAND-SUPPLY GAP AND ANNUAL CAPACITY OF THE RECOMMENDED ECONOMIC SIZE-PLANT
(In thousands)

NAME OF PRODUCT	DEMAND PROJECTION YEAR	PROJECTED DEMAND	EXISTING/APPROVED CAPACITY	MEASURED CAPACITY			ANNUAL CAPACITY OF THE RECOMMENDED ECONOMIC SIZE PLANT
				TOTAL	LOCAL	EXPORT	
Tree farming	1979	3,166 cu. m.	1,421 cu. m.	1,670 cu. m.	1,670 cu. m.	—	44 cu. m.
Lumber products	1975	91,490 bd. ft.	78,179 bd. ft	13,320 bd. ft.	—	13,320 bd. ft	6,000 bd. ft.
Plywood	1975	2,811 million sq. ft	2,589 million sq. ft.	298 million sq. ft.	100 million sq. ft.	198 million sq. ft.	86 million sq. ft.
Veneer	1975	1,507,000 sq. ft.	1,058,000 sq. ft.	449,000 sq. ft.	—	449,000 sq. ft.	90,000 sq. ft
Particle board	1976	35 MT	—	10 MT	10 MT	—	7.5 MT
Wood chips	1975	3,685 BDU	2,192 BDU	290 BDU	—	290 BDU	12 BDU
Lumbang oil	1974	10 MT	2 MT	8 MT	2 MT	6 MT	8 MT
Ramie	1974	14,500 sq. yds.	4,500 sq. yds.	10,000 sq. yds.	10,000 sq. yds.	—	5,000 sq. yds.
Pulp and paper	1975	362 MT	297 MT	65 MT	65 MT	—	30 MT
Long fiber pulp	1975	164 MT	9 MT	155 MT	55 MT	100 MT	60 MT
Clay-coated board	1975	42 MT	—	42 MT	35 MT	7 MT	24 MT
Fiberboard	1975	220 MT	82 MT	83 MT	83 MT	—	30 MT
Peanuts	1974	22 MT	12 MT	10 MT	10 MT	—	2.4 MT
Sorghum	1975	220.2 MT	—	124 MT	124 MT	—	4.8 MT
Soybeans	1974	100.9 MT	1.5 MT	99.4 MT	99.4 MT	—	3.2 MT
Rice	1975	378.5 MT	18.5 MT (for export)	360 MT	—	360 MT	13 MT
Corn	1975	100 MT	negligible	100 MT	—	100 MT	5.6 MT
Grain processing		not applicable	not applicable	543 MT	543 MT	variable	2 MT
Agar-agar	1975	.220 MT	—	.220 MT	.110 MT	.110 MT	.072 MT
Fruits and vegetable ..	1975	369 MT	168 MT	202 MT	101 MT	101 MT	1 MT
Tomato paste	1974	4 MT	—	4 MT	4 MT	—	0.3 MT
Coconut oil	1976	741 MT	587 MT	154 MT	—	154 MT	24.3 MT
Rice bran oil	1975	13 MT	—	13 MT	10 MT	3 MT	0.75
Palm oil	1975	37.3 MT	7.3 MT	30.0 MT	—	30.0 MT	6 MT
Dextrose	1975	.450 MT	—	.450 MT	.450 MT	—	.450 MT
Cattle	1974	72.8 MTDW	48.5 MTDW	24.3 MTD	24.3 MTDW	—	1 cowhead
Dairy	1974	1,195 MT	9 MT	1,186 MT	1,186 MT	—	.860 MT
Hogs	1974	511.4 MT	478.2 MT	33.2 MT	33.2 MT	—	.640 MT
Poultry (a) meat	1974	138.3 MT	106.3 MT	32.0 MT	32.0 MT	—	72 broilers
(b) eggs	1974	119.2 MT	95.5 MT	23.7 MT	23.7 MT	—	8.5 layers
(c) chicks ...	1974	131,668 chicks	101,504 chicks	30,164 chicks	30,164 chicks	—	11 breeders

Fish	(a) deep sea	1974	1,293 MT	1,222 MT	100 MT	100 MT	variable	2 MT
	(b) inland ...	1974	284 MT	275 MT	13 MT	13 MT	variable	.500 MT
Shrimps	(a) deep sea)	1974	269 MT	260 MT	12 MT	12 MT	variable	.125 MT
	(b) inland)							
Processed fish		1974	189.3 MT	negligence	189.3 MT	89.3 MT	100 MT	1 MT
Iron ore		1974	6,100 MT	2,100 MT	4,000 MT.	3,000 MT	1,000 MT	300 MT
Chromite ore		1974	290 MT	120 MT	170 MT	—	170 MT	80 MT
Copper ore		1976	376 MT	239 MT	137 MT	100 MT	37 MT	2.6 MT
Mercury		1974	5.5 flasks	3.5 MT	2 flasks	—	2 flasks	2 flasks
Primary steel		1974	2.000 MT	—	2,000 MT	2,000 MT	—	1,000 MT
Ferroalloys		1974	24 MT (local)	2.3 MT	21.7 MT	21.7 MT	—	6 MT
		1974	40 MT ferrosilicon	—	40 MT ferro-silicon	—	40 ferro-silicon	
		1974	20 MT ferro-chrome	—	20 MT ferro-chrome	—	20 MT ferro-chrome	
Copper metal		1974	100 MT	—	100 MT	30 MT	70 MT	60 MT
Nickel metal and alloys		1974	150 MT	50 MT	100 MT	—	100 MT	50,000 lbs.
Coal		1974	200 MT	—	200 MT	200 MT	—	200 MT
Natural gas		1974	variable	—	variable	variable	—	13,000 KWH
Sulfur		1974	150 MT	—	150 MT	—	150 MT	150 MT
Asbestos		1974	3.3 MT	1.5 MT	1.8 MT	1.8 MT	—	1.8 MT
Rock asphalt		1974	83 MT	—	83 MT	83 MT	—	26 MT
Perlite		1974	8.2 MT	—	8.2 MT	8.2 MT	—	600 bags
Metallurgical coke		1974	350 MT	—	350 MT	350 MT	—	350 MT
Dinnerware		1974	9.0 MT	1.8 MT	7.2 MT	5.2 MT	2.0 MT	1.8 MT
Clay		1974	34 MT	—	34 MT	34 MT	—	10 MT
Refractories		1974	60.3 MT	21.1 MT	39.2 MT	39.2 MT	—	15 MT
Industrial salt		1974	129 MT	73 MT	56 MT	56 MT	—	47 MT
Edibble salt		1974	320 MT	253 MT	67 MT	67 MT	—	105 MT
Activated resins		1974	2.6 MT	.7 MT	1.9 MT	1.9 MT	—	.480 MT
Polystyrene resins		1974	13.9 MT	6.8 MT	7.1 MT	7.1 MT	—	15 MT
Polyvinyl alcohol resins		1973	2 MT	—	2 MT	2 MT	—	2 MT
Polyvinyl chloride resins		1975	47.3 MT	28.8 MT	18.5 MT	18.5 MT	—	16.5 MT
Nylon fibers		1973	7.9 MT	4.0 MT	3.9	3.9 MT	—	2 MT
Rayon fibers		1974	25 MT	—	25 MT	25 MT	—	25 MT
Tetracyclines		1974	41 kg.	33 kg.	8 kg.	8 kg.	—	30 kg.
Streptomycins		1974	52 kg.	14 kg.	38 kg.	38 kg.	—	30 kg.
Penicillins		1974	39 kg.	13 kg.	26 kg.	26 kg.	—	30 kg.
Benzene hexacloride		1973	8.6 MT	—	8.6 MT	8.6 MT	—	6.6 MT
Chemical gypsum		1974	191 MT	122 MT	69 MT	69 MT	—	68.9 MT
FRP pipes and fittings		1973	700 ft.	—	700 ft.	700 mt.	—	420 ft
Petrochemical complex: Ethyline (naphtha cracker)		1976	200 MT	—	200 MT	200 MT	—	200 MT

Table 8.7 (*Cont'd*)

NAME OF PRODUCT	DEMAND PROJECTION YEAR	PROJECTED DEMAND	EXISTING/APPROVED CAPACITY	TOTAL	MEASURED CAPACITY LOCAL	EXPORT	ANNUAL CAPACITY OF THE RECOMMENDED ECONOMIC SIZE PLANT
Low-density polyethylene	1976	165	—	165 MT	115 MT	50 MT	165 MT
High-density polyethylene	1976	60 MT	—	60 MT	36 MT	24 MT	60 MT
Polypropylene	1976	52 MT	—	52 MT	40 MT	12 MT	52 MT
Vinyl chloride monomer	1976	120 MT	—	120 MT	76 MT	44 MT	120 MT
Special and alloy steel	1974	9.1 MT	—	9.1 MT	9.1 MT	—	0.5 MT
High carbon steel wire	1974	14.9	—	14.9 MT	14.9 MT	—	6 MT
API pipes	1974	13.5 MT	—	13.5 MT	13.5 MT	—	3.6 MT
Copper tubes	1974	1.6 MT	—	1.6 MT	1.6 MT	—	1.5 MT
Pliers and wrenches	1974	6,900 pcs.	2,400 pcs.	4,500 pcs.	4,500 pcs.	—	850 pcs.
Files	1974	116.5 dozens	—	116.5 doz.	116.5 doz.	—	100 doz.
Band saws	1975	3.150 units	—	3.150 units	3.150 units	—	0.12 units
Shapers	1976	2.7 units	—	2.7 units	2.7 units	—	0.4 units
Electric drills	1976	17 units	—	17 units	17 units	—	12 units
Lathes	1976	10.8 units	—	10.8 units	10.8 units	—	0.3 units
Drill presses	1976	6.8 units	—	6.8 units	6.8 units	—	1 unit
Fishing winches	1974	1.16 units	—	1.16 units	1.16 units	—	0.12 units
Platform scales	1976	5.3 units	1.0 units	4.3 units	4.3 units	—	1.0 units
Pumps	1974	27.0 units	15.6 units	12.0 units	12.0 units	—	1.8
Electric grinders	1976	8.5 units	—	8.5 units	8.5 units	—	7.86 units
Carbide—tipped tools	1974	1,945 units	45 units	1,900 units	1,900 units	—	82.3 units
Shaft-bearing products.	1974	745 units	—	745 units	745 units	—	90 units
Palay threshers	1975	9.5 units	—	9.5 units	9.5 units	—	0.2 units
Disc plows, disc harrows and roto-tillers	1974	6.6 units	3.6 units	3.0 units	2.4 units	0.6 units	0.24 units
Grain driers	1974	1 unit	0.25 units	0.75 units	0.75 units	—	0.25 units
Steam boilers	1974	1.2 units	—	1.2 units	1.2 units	—	0.06 units
Diesel engines	1975	17.50 units	14.65 units	2.85 units	2.85 units	—	1.0 units
High HP diesel engines	1975	5.4 units	—	5.4 units	5.4 units	—	0.1 units
Small gasoline engines	1974	64.0 units	—	64.0 units	64.0 units	—	21.0 units
Circuit breakers	1974	1,301 poles	—	1,301 poles	1,301 poles	—	480 poles
Magnetic starters	1974	56 units	17 units	39 units	19 units	20 units	12 units
Flashlights	1974	1,620 units	—	1,620 units	1,620 units	—	1,200 units
Porcelain insulators	1974	302 kgs.	—	302 kgs.	302 kgs.	—	300 kgs.
Electric motors	1974	105 units	18 units	87 units	87 units	—	20 units
Kilowatt-hour meters	1974	109.1 units	—	109.1 units	109.1 units	—	15 units
Power transformers	1974	81.5 KVA	—	81.5 KVA	81.5 KVA	—	50 KVA
Stalpeth	1974	1,000 lbs.	—	1,000 lbs.	1,000 lbs.	—	2,100 lbs.
Barges and tugboats	1976	317 GT	7.5	317 GT	317 GT	—	3 GT
Fishing boats	1974	86 GT	—	86 GT	86 GT	—	
Interisland ships	1974	374 GT	—	374 GT	374 GT	—	5 GT
Ocean-going ships	1974	828 GT	—	828 GT	828 GT	—	10 GT
Motorcycles	1974	49 units	—	49 units	49 units	—	10 units

The total capital costs of all the BOI-registered Projects were allocated as follows:

P0.914 billion — agrindustries
1.108 billion — mining and mineral processing industries
1.022 billion — all other manufacturing industries not included in the above classification.

On a per-industry basis, the following accounted for the major shares of the total investment pie:

P0.602 billion — Primary steel.
0.438 billion — Pulp and Paper
4.395 billion — Nickel
0.343 billion — Cold Rolled Strips and Coils

(2) Present Plan: Fourth Investment Priorities

The Fourth Plan covers 99 industries, of which 91 are carryovers from the last IPP and 8 are new additions. The new industries include chemical gypsum; petro-chemical complex; disc plows, disc harrows and roto tillers; grain driers; small gasoline engines; and flashlight cases. Lead-zinc concentrates, counted in the Third IPP list, was excluded from the present Plan because planned capacity has already been fully satisfied by approved projects.

The projects listed in the Fourth IPP are grouped into 17 categories which include the following:

Forest Products — Tree farming, lumber products, plywood, veneer, particle board, wood chips, and lumbang oil.

Fiber Products — ramie, pulp and paper, long fiber pulp, clay-coated board, and fiberboard.

Crop Production — peanuts, sorghum, soybeans, rice, corn, grain processing (rice).

Food Processing — agar-agar, fruits and vegetables, tomato paste, coconut oil, rice bran oil, palm oil, and dextrose.

Livestock and Fishing — cattle, dairy, hogs, poultry, fish (deep-sea), fish (inland), shrimps and shellfish, processed fish.

Metallic Mineral Products — Iron ore, chromite ore, copper ore, mercury, primary steel, ferro-alloys, copper metal, nickel metal and alloys.

Non-Metallic Mineral Products — Coal, natural gas, sulfur, asbestos, rock asphalt, perlite, metallurgical coke, dinnerware, clay, and refractories.

Chemical Products — Salt (industrial salt and edible salt), activated carbon, polystyrene resins, polyvinyl chloride resins, nylon fibers, rayon fibers, polyvinyl alcohol resins, antibiotics (tetracyclines, streptomycins, penicillins), benzene hexachloride, chemical gypsum, fiberglass-reinforced plastic pipes and fittings, integrated petro-chemical complex (ethylenenaptha cracker, low-density polyethylene, high-density polyethylene, polypropylene, vinyl chloride monomer).

Iron or Steel-Based Industries — special and alloy steel, high carbon steel wire, and API pipes.

Non-Ferrous Metal Products — copper tubes.

Hand Tools — pliers and wrenches, and files.

Industrial Machinery — band saws, shapers, electric drills, latches, drill presses, fishing winches, platform scales, pumps, electric grinder, carbide-tipped tools, and shaft-bearing products.

Farm Machinery — palay threshers, disc plows, disc harrows and roto tillers, and grain driers.

Fabricated Metal Products — team boilers

Engines — diesel engines, high HP diesel engines and small gasoline engines.

Electrical Equipment — electrical controls (circuit breakers, magnetic starters), flashlights, porcelain, insulators, electric motors, kilowatt-hour meters, power transformers, and stalpeth.

Transport Equipment — barges and tugboats, fishing boats, inter-island ships; ocean-going ships, and motorcycles.

A detailed listing of projects included in the 4th IPP with information on demand-supply gap, investment, labor requirement, value of output of the recommended economic-size plant is given in Tables 8.7, 8.7A, 8.7B, and 8.7C.

The list of the industrial activities in the IPP was based not only on the desirability of the investment for the economy but also on the commercial feasibility of the project. It will be noted that these activities may fall under one or more of the following categories:

(1) Processing of export commodities into semi-finished or finished products, whether for exports or for the domestic market, and increased utilization of by-products in such processing.

(2) Production of commodities related to or included in the agricultural development program.

(3) Production of goods made of indigenous materials required both for the domestic market and for export.

(4) Production of goods even if not out of indigenous materials which have a high degree of backward or forward linkage.

(5) Production of capital goods.

Table 8.7A—FOURTH INVESTMENT PRIORITIES PLAN OF THE BOI, RECOMMENDED ECONOMIC-SIZE PLANT BY INVESTMENT REQUIREMENT AND VALUE OF OUTPUT

(In thousand pesos)

NAME OF PRODUCT	INVESTMENT REQUIREMENT			VALUE OF OUTPUT
	TOTAL	CAPITAL EQUIPMENT	OTHERS	
Tree farming	3,915	3,801	834	1,760
Lumber products	5,241	4,027	1,214	7,099
Plywood	15,462	11,576	3,886	19,541
Veneer	7,372	5,729	1,643	11,934
Particle board	4,611	3,702	909	4,687
Wood chips	1,707	874	833	1,080
Lumbang oil	6,311	4,199	2,112	10,521
Ramie	30,000	27,000	3,000	31,000
Pulp and paper	156,000	112,000	44,000	60,000
Long fiber pulp	254,000	198,000	56,000	84,150
Clay coated board	63,748	50,725	13,023	43,200
Fiberboard	56,485	43,808	12,677	26,910
Peanuts	4,601	1,449	3,152	3,293
Sorghum	4,030	1,141	2,889	1,392
Soybeans	4,030	1,141	2,889	2,320
Rice	13,900	7,481	6,419	11,050
Corn	2,903	455	2,448	1,098
Grain processing	4,901	3,901	1,000	8,424
Agar-agar	4,296	2,889	1,407	2,755
Fruits and vegetables	7,451	6,090	1,361	3,000
Tomato paste	668	456	212	213
Coconut oil	12,813	7,888	4,925	45,344
Rice bran oil	7,744	5,394	2,350	2,492
Palm oil	6,176	2,705	3,471	6,988
Dextrose	3,160	1,769	1,391	990
Cattle	3,046	194	2,852	531
Dairy	1,609	955	654	2,410
Hogs	2,164	120	2,044	2,304
Poultry (a) meat	129	22	107	339
(b) table eggs	194	18	176	506
(c) chicks	634	131	503	786
Fish (a) deep sea	3,263	2,833	430	1,775
(b) inland	1,670	990	680	1,300
Shrimps (a) deep sea	3,995	3,145	850	2,475
(b) inland	1,670	990	680	1,330
Processed fish	1,450	750	700	4,417
Iron ore	6,000	1,812	4,188	9,996
Chromite ore	12,440	11,440	1,000	5,760
Copper ore	24,487	19,021	5,466	17,160
Mercury	1,442	1,072	370	4,320
Primary steel	783,000	384,000	399,000	363,190
Ferro-alloys	8,500	8,200	300	6,900
Copper metal	126,800	123,363	3,437	30,000
Nickel metal and alloys	977,400	852,000	125,400	274,479
Coal	4,820	4,320	500	5,750
Natural gas	8,000	6,000	2,000	2,600
Sulfur	42,200	36,200	6,000	27,000
Asbestos	753	547	206	2,160
Rock asphalt	767	517	250	598
Perlite	2,150	1,165	985	4,200
Metallurgical coke	101,000	80,000	21,000	105,000
Dinnerware	3,200	2,800	400	4,500
Refractories	14,950	9,840	5,110	11,700

Table 8.7A (*Cont'd*)

NAME OF PRODUCT	INVESTMENT REQUIREMENT TOTAL	CAPITAL EQUIPMENT	OTHERS	VALUE OF OUTPUT
Files	2,216	1,748	468	2,037
Band saws	2,127	1,308	819	3,240
Shapers	3,779	2,479	1,300	4,334
Electric drills	2,074	1,038	1,036	3,000
Lathes	4,995	3,060	1,935	6,000
Drill presses	1,869	960	909	1,800
Fishing winches	1,574	490	1.084	4,500
Platform scales	948	441	507	825
Pumps	868	440	428	990
Electric grinders	2,216	1,038	1,178	3,930
Carbide-tipped tools	1,179	662	517	1,952
Shaft-bearing products	1,606	744	862	1,080
Palay threshers	752	200	552	1,000
Disc plows, disc harrows and roto-tillers	795	485	310	1,512
Grain driers	1,529	362	1,167	3,500
Steam boilers	2,343	922	1,421	4,200
Diesel engines	1,632	992	640	3,800
High HP diesel engines	8,295	6,360	1,935	4,450
Small gasoline engines	9,856	7,348	2,508	12,264
Circuit breakers	1,086	686	400	2,330
Magnetic starters	1,169	777	392	3,915
Flashlights	3,591	2,998	593	6,600
Porcelain insulators	6,959	6.609	350	3,300
Electric motors	7,700	5,100	2,600	3,000
Kilowatt-hour meters	496	286	210	1,462
Power transformers	2,390	2,040	350	1,525
Stalpeth	6,500	5,125	2,375	17,241
Barges and tugboats	5,300	3,000	2,300	7,500
Fishing tugboats	14,000	6,986	7,104	22,250
Interisland ships	24,000	18,000	6,000	40,000
Ocean-going ships	5,893	1,688	4,205	19,000
Motorcycles	1,225	925	300	3,000
Clay	4,500	3,000	1,500	6,000
Industrial salt	5,058	3,558	1,500	21,000
Edible salt	5,480	3,655	1,825	3,168
Activated carbon	28,270	21,040	7,230	33,040
Polystyrene resins	11,000	7,500	3,500	18,000
Polyvinyl chloride resins	14,971	9,650	5,321	28,182
Polyvinyl chloride resins	43,565	34,289	9,276	28,360
Nylon fibers	345,566	283,545	62,021	123,675
Rayon	8,500	3,600	4,900	8,400
Tetracyclines	8.068	3,168	4,900	8,400
Streptomycins	8,068	3,168	4,900	8,400
Penicillins	9,000	7,400	1,600	7,920
Benzene hexacloride	456	288	168	1,500
Chemical gypsum	2,320	250	2,070	4,725
FRP pipes and fittings	1,177,000	922,267	254,733	787,240
Petrochemical complex	1,866	816	1,050	3,000
Special and alloy steel	6,817	3,365	3,452	13,500
High carbon steel wire	4,147	1,982	2,165	5,490
API pipes	16,281	10,060	6,221	21,750
Copper tubes	3,048	2,086	962	4,900
Pliers and wrenches				

Table 8.7B—FOURTH INVESTMENT PRIORITIES PLAN OF THE BOI, LABOR REQUIREMENT OF ECONOMIC-SIZE PLANT BY LEVEL OF SKILL

(In numbers)

NAME OF PRODUCT	TOTAL NUMBER	TOTAL SALARY (₱ 000)	SUPERVISORY & SKILLED NUMBER	SUPERVISORY & SKILLED SALARY (₱ 000)	SEMI-SKILLED NUMBER	SEMI-SKILLED SALARY (₱ 000)	UNSKILLED NUMBER	UNSKILLED SALARY (₱ 000)
Tree farming	94	400	54	270	19	64	21	66
Lumber products	154	611	54	336	27	96	73	179
Plywood	299	1,073	111	466	130	468	58	139
Veneer	133	814	68	286	40	144	25	384
Particle board	40	143	23	96	5	18	12	29
Wood chips	47	162	25	105	4	14	18	43
Lumbang oil	76	159	24	58	24	52	28	49
Ramie	1,316	4,700	64	269	1,189	4,280	63	151
Pulp and paper	570	2,854	240	1,080	220	660	110	1,114
Long fiber pulp	640	1,860	100	420	240	720	300	720
Clay coated board	125	517	19	154	33	133	73	230
Fiberboard	124	464	60	252	45	162	19	50
Peanuts	112	284	4	49	35	95	73	140
Sorghum	112	244	4	36	35	84	73	124
Soybeans	112	208	4	36	35	48	73	124
Rice	186	331	5	31	31	143	150	158
Corn	109	150	4	34	35	66	70	51
Grain processing	19	74	7	46	10	24	2	4
Agar-agar	19	59	5	21	6	19	8	19
Fruits and vegetables	46	144	14	59	—	—	32	85
Tomato paste	10	30	3	11	3	9	4	10
Coconut oil	24	80	6	25	10	36	8	19
Rice bran oil	33	119	13	55	14	50	6	14
Palm oil	82	329	25	126	27	117	30	86
Dextrose	10	39	5	21	5	18	—	—
Cattle	8	25	3	14	—	—	5	11
Dairy	20	95	5	44	8	32	7	19
Hogs	11	36	3	17	2	6	6	13
Poultry (a) meat	7	26	1	7	—	—	6	19
(b) table eggs	9	32	1	7	—	—	8	25
(c) chicks	13	53	3	20	2	8	8	25
Fish (a) deep sea	76	274	21	148	24	63	31	63
(b) inland	33	211	9	110	19	92	5	9
Shrimps (a) deep sea	109	440	43	271	31	78	35	91
(b) inland	33	211	9	110	19	92	5	9
Processed fish	50	235	15	137	11	39	24	59
Iron ore	500	1,812	75	642	175	630	250	540
Chromite ore	347	1,488	47	432	100	480	200	576
Copper ore	620	3,360	250	2,100	270	972	100	288
Mercury	100	611	21	384	30	111	49	116
Primary steel	2,000	13,200	1,000	9,600	1,000	3,600	—	—
Ferro-alloys	119	665	93	574	22	79	4	12
Copper metal	488	2,000	200	1,351	288	649	—	—
Nickel metal and alloys	1,200	9,710	475	5,034	410	3,542	315	1,134
Coal	405	1,401	30	240	75	297	300	864
Natural gas	200	600	50	240	150	360	—	—
Sulfur	500	2,913	150	1,413	200	960	150	540
Asbestos	65	281	24	155	11	40	30	86
Rock asphalt	60	270	20	126	40	144	—	—
Perlite	71	340	57	298	14	42	—	—
Metallurgical coke	250	1,500	170	1,140	60	288	20	72
Dinnerware	67	331	9	71	42	202	16	58
Clay	35	186	25	156	10	30	—	—
Refractories	111	470	86	380	25	90	—	—
Industrial salt	76	276	22	117	42	124	12	36

Table 8.7B (*Cont'd*)

NAME OF PRODUCT	TOTAL NUMBER	TOTAL SALARY (₱ 000)	SUPERVISORY & SKILLED NUMBER	SUPERVISORY & SKILLED SALARY (₱ 000)	SEMI-SKILLED NUMBER	SEMI-SKILLED SALARY (₱ 000)	UNSKILLED NUMBER	UNSKILLED SALARY (₱ 000)
Edible salt	76	276	22	117	42	124	12	36
Activated carbon	70	249	10	72	21	100	39	76
Polysterene resins	160	756	114	612	28	101	18	43
Polyvinyl alcohol resins	70	317	40	231	30	86	—	—
Polyvinyl chlorine resins	101	471	37	259	34	126	30	86
Nylon fibers	165	1,038	117	840	36	162	12	36
Rayon fibers	1,072	5,078	527	3,024	279	1,256	266	798
Tetracyclines	82	401	15	126	31	167	36	108
Streptomycins	82	401	15	126	31	167	36	108
Penicillins	82	401	15	126	31	167	36	108
Bezene hexacloride	88	340	28	186	44	120	16	34
Chemical gypsum	29	116	11	57	12	42	6	17
FRP pipes and fittings	34	122	4	37	6	27	24	58
Integrated petrochemical complex	1,240	23,657	870	18,900	300	4,048	70	709
Special and alloy steel	63	232	30	138	24	72	9	22
High carbon steel wire	41	198	34	178	5	15	2	5
API pipes	46	218	28	158	12	43	6	17
Copper tubes	66	250	57	228	3	8	6	14
Pliers and wrenches	60	476	35	394	15	54	10	28
Files	100	379	34	200	32	115	34	82
Band saws	95	378	65	296	18	54	12	28
Shapers	63	360	25	221	24	110	14	29
Electric drills	50	257	28	179	11	46	11	32
Lathes	130	739	67	497	34	172	29	70
Drill presses	51	221	31	156	10	36	10	29
Fishing winches	50	268	20	143	24	110	6	14
Platform scales	18	98	8	55	5	29	5	14
Pumps	37	151	17	86	10	36	10	29
Electric grinders	32	184	22	157	5	15	5	12
Carbide-tipped tools	36	143	16	80	12	43	8	19
Shaft-bearing products	31	105	16	62	10	30	5	13
Palay threshers	54	172	26	83	18	64	10	24
Disc plows, disc harrows and roto-tillers	34	147	18	94	11	41	5	12
Grain driers	58	237	20	104	34	120	5	12
Steam boilers	51	449	26	342	15	63	10	44
Diesel engines	83	383	53	282	20	72	10	29
High HP diesel engines	148	554	83	362	30	108	35	84
Small gasoline engines	286	1,460	240	1,300	46	160	—	—
Circuit breakers	134	429	93	309	36	108	5	12
Marnetic starters	50	180	35	116	18	54	4	10
Flashlights	97	357	19	108	67	241	11	26
Porcelain insulators	75	228	15	68	40	120	20	40
Electric motors	250	610	50	150	150	360	50	100
Kilowatt-hour meters	25	84	12	50	8	24	5	10
Power transformers	10	36	4	19	4	12	2	5
Stalpeth	119	414	53	215	66	199	—	—
Barges and tugboats Fishing tugboats	250	590	50	150	100	240	100	200
Interisland ships	1,550	3,690	350	1,050	600	1,440	600	1,200
Ocean-going ships	2,150	4,890	350	1,050	600	1,440	1,200	2,400
Motorcycles	66	304	33	185	17	73	16	46

Table 8.7C— INVESTMENT AND LABOR REQUIREMENTS OF RECOMMENDED ECONOMIC SIZE PLANTS OF THE 4TH IPP

NAME OF PRODUCT	INVESTMENT REQUIREMENTS (₱ 000)	NUMBER OF WORKERS	INVESTMENT PER WORKER (₱ 000)	ANNUAL PAYROLL (₱ 000)
Agrindustries	701,349	4,848	144,668	17,411
Mining	2,159,134	7,138	302,484	41,138
Chemicals				
a) With petrochemical complex	1,671,822	3,427	487,838	33,138
b) Without petrochemical complex	494,822	2,187	226,256	10,138
Metal and engineering product	82,812	1,397	59,278	6,617
Electrical equipment	29,891	1,046	28,576	3,816
Transport equipment	49,193	1,046	12,249	9,474
TOTAL				
a) With petrochemical complex	4,694,201	21,872	214,621	112,355
b) Without petrochemical complex	3,517,201	20,632	170,473	88,698

The Investment Priorities Plans have always encouraged certain activities which complement the agricultural development program through very attractive incentives. The production and processing of a number of crops are listed as preferential areas of investment in the Fourth IPP. Large-scale processing and storage of rice grain is also tagged as a preferred activity. Many rice mills in the Philippines have low recovery rates which could be rendered 16 per cent more efficient by larger processing facilities. Finally, for food processing, stock and fish production and marketing, feed grains and vegetable production programs are also priority areas in the investment plan.

The forestry activities covered in the present IPP include plywood, veneer, particle board, wood chips, fiber board and lumber products. The utilization of forest products is being encouraged as a preferred investment area not only to make Philippine log products, such as plywood and veneer, continuously competitive with the same products of other countries, but also to provide greater employment in the log-producing regions of the country.

It will also be noted that tree farming is listed as a preferred area of investment. The output from tree farms may be useful as raw materials to feed the pulp and paper mills also embraced by the 4th IPP.

B. Export Priorities Plan

Prior to the approval of the Export Incentives Act, export incentives were provided for products out of the existing capacity of registered firms under the Investment Incentives Act. In 1970 the export revenues of the 37 BOI-registered firms with existing exportable products amounted to ₱17,806,144. The export performance of these firms indicated that products which are utilizing more indigenous inputs earned more than the export products dependent on imported raw materials, in terms of net foreign exchange. On the overall, there was a marked progressive trend in the quarterly value of exports that were generated during the year.

A much greater volume of manufactured exports is expected for the next four years, as more substantial incentives forthcame with the approval of the Export Incentives Act last August 31, 1970. The Act extends various incentives which include exemptions from tariffs and import taxes for certain export products listed in the Export Priorities Plan (EPP). The products listed in the EPP include only those processed goods whose individual f.o.b. export values did not exceed U.S.$5 million in 1968.

The EPP lists two categories of preferred exportable products. List A covers those products which, besides having great export potential and domestic demand, can be produced out of existing facilities. Registrant enterprises for List A products are allowed tariff and tax exemptions on imported capital equipment essential only to expand capacity for meeting an export contract. This is made in order to prevent further overcrowding of industries with excess capacity in relation to the domestic market.

List B is for products which have little demand in the domestic market and would require an export market to be viable. Registrant enterprises under this category are allowed exemptions from tariffs and import taxes on capital equipment. No serious over-capacity problem would arise for these products even if the anticipated export transaction does not materialize.

The BOI has drawn two EPP's from the implementation of the Export Incentives Act. The 1st EPP is essentially the same as the 2nd EPP, except for 24 additional new items. The 2nd EPP includes the following:

List A

Processed food products, processed rubber products, metallurgical products, non-metallic products, machinery and equipment parts, electrical product machine and parts, wood products, pharmaceutical products, fiber products, textile products, paper products, and other products. (See Tables 8.8A, 8.8B and 8.8C for information on the recommended economic size plants.)

List B

The second list consisting of exportable products of new capacities that have yet to be established includes the following: processed fruits and vegetables, agar-agar, refined glycerine, processed shrimps and shellfish, activated carbon, furfural, essential oils, blockboard and blockboard cores, cellulosic staples for speciality pulp, long fiber pulp, footwear, ferro-alloys (ferro-silicon and ferro-chrome), and electronic parts and-components such as transistors, diodes, printed circuit boards, and integrated circuits.

C. Regional Dispersal of Projects

In order to spread economic activities throughout the country and thereby provide employment opportunities to a greater number of people, the present industrial plan envisions new investments farther from Metropolitan Manila. In the 4th IPP, as indicated in Table 8.7, the dispersal of industrial projects, although rather spotty, indicates that there are several projects in the IPP in each of the ten defined regions of the country.

In the IPP, agrindustrial projects are more widely dispersed compared with the other investment areas. Projects in the chemical industries seem to be concentrated in Manila and neighboring regions, while most mining and mineral processing projects appear to be directed to areas of rich mineral sources. Projects in the engineering industries area are all in the Southern Luzon Region. Most industries exporting products other than minerals and processed mineral products are located in the Greater Manila Area. Evidently, the pattern of locational distribution of projects is greatly influenced by the factors affecting the profitableness of the enterprises.

Under the investment promotion campaign of the BOI, and with the cooperation of local civic organizations, the plan of activities includes the seminars and related services in various parts of the country to stimulate interest and actual undertaking of projects listed in the Investment and Export Priorities Plans. The BOI, so far, had extended these services as far out to Bacolod, Cebu, Davao and Cagayan de Oro.

In line with the industrial dispersal scheme, the BOI envisions the creation of an Investment Promotion Center in the major cities and the eventual establishment of small regional offices. The staff of these offices will be responsible for the handling of investment promotion, inquiry, and registration of applicants in various parts of the country. The Central Office would also handle inquiries and other services from foreign countries.

D. Employment Generation

Studies reveal that the 4th IPP projects will give direct employment to 21,872 persons involving a total annual salary of ₱112.4 million. Mining and agrindustries will generate the highest direct employment, 7,138 and 4,848, respectively. In terms of payroll, however, chemicals would be second to mining, paying higher salaries than even agrindustries. List B projects hope to employ approximately 3,000 persons with a total annual payroll of ₱7.59 million. It must be emphasized that these employment figures relate only to those to be **directly** employed. They do not take into account total employment generation via the forward and backward linkage effects. Because of this, the estimates of capital-intensity of some projects in Table 8.7c have been overstated. The agrindustrial projects, for example, generate more indirect employment than the metal or electrical projects; but since these indirect benefits are not taken into account, investment per worker in the agrindustrial projects appears higher than in the metal or electrical projects.

E. Mineral Exploration Program

Over and above the windfall support to the mining industry accruing from the implementation of the investment incentives act and the export incentives act, plus the national effort in the construction and repair of roads, wharfs, bridges and power facilities in mining areas, the government will also concentrate development resources with the view to intensify the discovery and eventual development of mineral wealth in the country. During the next four years, the program aims to accelerate the release of more lands with high exploitation potential for mineral and petroleum. The major operational work will include comprehensive mineral land surveys and regional geological mapping integrated with reconnaissance, geochemical prospecting of potential mineralized zones.

In the geological survey the Bureau of Mines will cover approximately 1.2 million hectares in four yearly

Table 8.8A—SECOND EXPORT PRIORITIES PLAN: DEMAND-SUPPLY GAP AND ANNUAL CAPACITY OF THE RECOMMENDED ECONOMIC-SIZE PLANT

NAME OF EXPORT PRODUCT	DEMAND PROJECTION YEAR	PROJECTED DEMAND	EXISTING CAPACITY	MC FOR EXPORT	ANNUAL CAPACITIES OF RECOMMENDED ECONOMIC SIZE PLANT
Processed fruits and vegetables	1975	268,000 MT	168,000 MT	100,000 MT	1,000 MT
Agar-agar	1975	110 MT	—	110 MT	72 MT
Refined Glycerine	1975	Variable	—	Variable	Variable
Precessed shrimps and shellfish	1974	121,875 MT	21,875 MT	100,000 MT	300 MT
Activated Carbon	1975	Variable	720 MT	Variable	480 MT
Furfural	1975	Variable	6,000 MT	Variable	6,000 MT
Essential oils	1975	Variable	—	Variable	3,000 kgs.
Blockboard and blockboard ccres	1974	200,080 MSF	19,008 MSF	181,072 MSF	1,920 MSF
Cellulcse staples for specialty pulp	1974	38,500 MT	—	38,500 MT	15,000 MT
Long fiber pulp	1974	45,000 MT	—	45,000 MT	30,000 MT
Footwear	1974	3.0 million prs.	1.3 million prs.	1.7 million prs.	.3 million prs.
Ferro-alloys					
a. ferro-silicon	1974	40,000 MT	—	40,000 MT)	6,000 MT
b. ferro-chrome	1974	20,000 MT	—	20,000 MT)	
Electronic parts and components	1974	Variable	—	Variable	45 million devices

Table 8.8B—SECOND EXPORT PRIORITIES PLAN: RECOMMENDED ECONOMIC-SIZE PLANT BY INVESTMENT REQUIREMENT AND VALUE OF OUTPUT

(In thousand pesos)

NAME OF PRODUCT	INVESTMENT REQUIREMENTS TOTAL	CAPITAL EQUIPMENT	OTHERS	VALUE OF OUTPUT
Processed fruits and vegetables	7,451	7,056	395	3,000
Agar-agar	4,296	2,889	1,407	2,755
Refined glycerine	Variable	Variable	—	Variable
Processed shrimps and shellfish	3,065	1,934	1,131	1,747
Activated carbon	2,618	1,362	1,256	1,363
Furfural	20,710	9,090	11,620	6,864
Essential oils	768	103	665	1,050
Blockboard and blockboard cores	2,000	880	1,120	2,073
Cellulose staples for specialty pulp	13,066	9,244	3,822	1,200
Long fiber pulp	200,000	120,000	20,000	57,686
Footwear	6,970	1,222	5,748	10,082
Ferro-alloys	8,500	8,200	300	6,900
Electronic parts and components	1,631	1,415	216	4,147

Table 8.8C—SECOND EXPORT PRIORITIES PLAN: LABOR REQUIREMENTS OF RECOMMENDED ECONOMIC-SIZE PLANT BY LEVELS OF SKILL

NAME OF PRODUCT	TOTAL NUMBER	TOTAL SALARY (₱000)	SUPERVISORY & SKILLED NUMBER	SUPERVISORY & SKILLED SALARY (₱000)	SEMI-SKILLED NUMBER	SEMI-SKILLED SALARY (₱000)	UNSKILLED NUMBER	UNSKILLED SALARY (₱000)
Processed fruits and vegetables	46	144	14	59	—	—	32	85
Agar-agar	19	59	5	21	6	19	8	19
Refined glycerine	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Processed shrimps and shellfish	58	169	17	84	6	17	35	68
Activated carbon	13	37	3	11	10	26	—	—
Furfural	95	579	19	242	15	91	61	247
Essential oils	146	464	26	144	40	144	80	176
Blockboard and blockboard cores	56	153	12	40	7	24	37	89
Cellulose staples for specialty pulp	401	996	46	200	105	289	250	507
Long fiber pulp	1,200	3,654	330	1,710	270	648	600	1,296
Footwear	300	779	25	90	145	435	130	254
Ferro-alloys	119	557	93	484	22	66	4	7
Electronic parts and components	550	n.a.	400	n.a.	150	n.a.	—	—

investigations for possible presence of mineral deposits. The main activities include the conducting of reconnaissance survey of areas; investigation of the lithology, structure, origin, formation and association of metals, non-metallic and coal deposits; and surveys of probable petroleum areas for exploitation and effective development.

The mineral land surveys will cover an average area of 100,000 hectares a year during the period. This is intended to facilitate the issuance of leases, patents and permits for mining claims and petroleum concessions. At present there are 160 petroleum concessions with an aggregate area of 6 million hectares. Major drilling operations are in progress.

In recent years, several important nickel deposits have been discovered in various parts of the country. Nickel ore was first exported in December 1970. Nickel production in commercial quantity is programmed for FY 1973 as new big mining, smelting and refining complexes start operations. Similarly, the plan envisions increased mineral output in copper, iron, chromite, manganese ore, zinc and gold, as the expanded programs initiated in previous years continue to be brought into full play during the next four years. The financing aspect of these activities is back-stopped by the determined effort of the Government to tap both public and private financing institutions and, possibly, also foreign borrowings.

Mining activities, which will essentially be carried out by the private sector, will be further supported by reforms in specific administrative and legislative measures. The Administration intends to amend two laws: the existing Mining Act in order to minimize overlapping of claims and facilitate granting of lease contrats on mineral lands, and the existing Petroleum Act in order to attract foreign investors and service contractors for the delimitation and development of promising territories. It also intends to intensify negotiations on ECAFE-sponsored bilateral agreements with developed countries for geological and mineral surveys of offshore areas. Meanwhile, effective mining practices and methods for both operations and administration aspects, which are to include mines safety inspection, mines investigation and valuation, and laboratory services for various mining activities, will also be intensified. These services will be extended to about 800 mines per year from FY 1972-75.

5. FINANCING THE PROGRAM

A. Financing Requirements

The total investment requirement of mining and manufacturing over the four-year period from FY 1972-75 will amount to some ₱11.24 billion at current prices. The bulk of the investments will be utilized in projects included in the Fourth Investment Priorities Plan and the Second Export Priorities Plan (see Table 8.9). The distribution of total investment by major project group is given below:

INVESTMENT REQUIREMENT OF THE INDUSTRIAL PROGRAM
FY 1972-75

PROJECT GROUP	INVESTMENT MILLION PESOS	INVESTMENT PER CENT OF TOTAL
BOI Projects	7,715	68.64
Non-BOI Projects	3,325	29.58
Industrial Research	200	1.78
TOTAL	11,240	100.00

The total financial requirements of the industrial sector, including both fixed and working capital, are given below:

TOTAL FINANCIAL REQUIREMENT OF THE INDUSTRIAL PROGRAM
FY 1972-75
(In million pesos at current prices)

CAPITAL	FY 1972	FY 1973	FY 1974	FY 1975	FY TOTALS
Fixed Capital	2366	2635	2939	3300	11,240
Working Capital	592	659	735	825	2,811
TOTAL	2958	3294	3674	4125	14,051

[1] These fixed capital requirement estimates assumes no further deterioration in the exchange rate during the Plan period. Working capital requirements are assumed to be one-fourth of the fixed capital.

B. Sources of Funds

About 76 per cent of the requirements will be financed from domestic savings; the remaining 24 per cent will come from gross foreign direct investments and borrowings (See Table 8.10). Inflow of direct foreign investments is not expected to be very substantial, and this may total less than $25 million during the Plan period. However, foreign borrowings will constitute the bulk of foreign financing insofar as balance of payments constraints may allow.

Direct investments of personal savings have been manifestly consistent during the immediate past years, 1970-71 included. Paid-up capital of new ventures in the mining and manufacturing sectors registered with the Securities and Exchange Commission has been steadily rising. Increases in capitalization by existing

Table 8.9—INVESTMENT REQUIREMENTS OF FOURTH IPP AND 2ND EPP PROJECTS FY 1971-72 TO FY 1975-76

REGION,* INDUSTRY & PROJECT	TOTAL INVESTMENT (IN THOUSAND) PESOS	TOTAL INVESTMENT (IN THOUSAND) U.S. $	EXPORT ORIENTED (IN THOUSAND) PESOS	EXPORT ORIENTED (IN THOUSAND) U.S. $	MARKET ORIENTED (IN THOUSAND) PESOS	MARKET ORIENTED (IN THOUSAND) U.S $
TOTAL PHILIPPINES	2,201,240	507,978	844,383	194,857	1,356,857	507,978
Agrindustries	704,559	162,590	253,479	58,495	451,080	104,095
Mining & Mineral processing Industries	396,499	91,500	146,167	33,500	251,332	58,000
Chemical Industries	678,474	156,571	261,570	60,362	416,904	96,209
Engineering Industries	369,708	85,317	47,666	11,000	322,042	74,317
Other EPP Projects	52,000	12,000	52,000	12,000	—	—
REGION I	313,028	72,237	112,668	32,500	200,360	46,237
Agrindustries	172,194	39,737	n.a.	n.a.	172,194	39,737
Pulp and Paper	170,950	39,450	—	—	170,950	39,450
Rice Milling	1,244	287	—	—	1,244	287
Cellulosic Staples	n.a.	n.a.	n.a.	n.a.	—	—
Mining and Mineral Processing Industries	140,834	32,500	112,668	26,000	28,166	6,500
Copper Smelter	140,834	32,500	112,669	26,000	28,166	6,500
REGION 2	3,418	789	—	—	3,418	789
Agrindustries	3,418	789	—	—	3,418	789
Rice Milling	3,418	789	—	—	3,418	789
REGION 3	500,256	115,443	246,394	56,860	253,862	58,583
Agrindustries	4,973	1,147	—	—	4,973	1,147
Rice Milling	4,973	1,147	—	—	4,973	1,147
Chemical Industries	495,283	114,296	246,394	56,860	248,889	57,433
Pumps	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Magnetic Starter Manufacturing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Circuit Breaker	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Electronic Parts	47,666	11,000	47,666	11,000	—	—
Motorcycle Assembly	n.a.	n.a.	—	—	n.a.	n.a.
Progressive Car Manufacturing	294,667	68,000	—	—	294,667	68,000
REGION 5	62,834	14,500	62,834	14,500	—	—
Agrindustries	58,500	13,500	58,500	13,500	—	—
Coconut By-products	58,500	13,500	58,500	13,500	—	—
Chemical Industries	4,334	1,000	4,334	1,000	—	—
Essential Oils	4,334	1,000	4,334	1,000	—	—
REGION 6	206,593	47,676	7,331	1,692	199,262	45,984
Agrindustries	200,085	46,174	823	190	199,262	45,984
Fireboard	26,867	6,200	—	—	26,867	6,200
Pulp and Paper	170,950	39,450	—	—	170,950	39,450

Rice Milling	622	144	—	—	622	144
Processed shrimps and shellfish	1,646	380	823	190	823	190
Chemical Industries	6,508	1,502	6,508	1,502	—	—
Furfural	6,508	1,502	6,508	1,502	—	—
REGION 7	201,074	46,402	171,167	39,500	29,907	6,902
Agrindustries	60,241	13,902	58,500	13,500	1,741	402
Rice Milling	1,741	402	—	—	1,741	402
Coconut by-products	58,500	13,500	58,500	13,500	—	—
Mining and Mineral Processing Industries	140,833	32,500	112,667	26,000	28,166	7,500
Copper Smelter	140,833	32,500	112,667	26,000	28,166	6,500
REGION 8	149,537	34,508	29,962	6,914	119,575	27,594
Agrindustries	28,768	6,638	25,629	5,914	3,139	724
Coconut oil	22,389	5,166	22,389	5,166	—	—
Banana products	1,344	310	1,344	310	—	—
Rice Milling	1,243	287	—	—	1,243	287
Processed fruits and vegetables	3,792	875	1,896	438	1,896	437
Mining and Mineral Processing Industries	114,832	26,500	4,333	1,000	110.499	25,500
Ferro-alloys	8,666	2,000	4,333	1,000	4,333	1,000
Aluminum	106,166	24,500	—	—	106,166	24,500
Steel industry	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Chemical industries	5,937	1,370	—	—	5,937	1,370
Caustic soda	2,253	520	—	—	2,253	520
Acetylene black	3,684	850	—	—	3,684	850
REGION 9	105,034	24,239	63,761	14,714	41,273	9,525
Agrindustries	105,034	24,239	63,761	14,714	41,273	9,525
Coconut oil	22,389	5,167	22,389	5,167	—	—
Banana product	1,343	310	1,343	310	—	—
Processed fruits and vegetables	3,792	875	1,896	437	1,896	438
Long fiber pulp	76,267	17,600	38,133	8,800	38,134	8,800
Rice milling	1,243	287	—	—	1,243	287
Region 10	28,889	6,667	25,639	5,917	3,250	750
Agrindustries	28,889	6,667	25,639	5,917	3,250	750
Coconut oil	22,389	5,167	22,389	5,167	—	—
Blockboard	6,500	1,500	3,250	750	3,250	750
Other EPP Projects	52,000	12,000	52,000	12,000		

n.a.—not available

* Regional breakdown has been made to conform with the proposed regional groupings of the Commission on Reorganization.

Table 8.10—FINANCING OF INVESTMENTS IN MINING AND MANUFACTURING
(In million pesos at current prices)

	1972	1973	1974	1975	TOTALS 1972-75	% OF TOTALS 1972-75
FIXED CAPITAL REQUIREMENT	2366	2635	2939	3300	11240	
FINANCING SOURCES						
Personal Savings	752	800	870	935	2357	29.87
New Paid-Up Capital	135	150	170	185	640	5.69
Increases in Paid-Up Capital	280	300	320	340	1240	11.03
Uninstitutional Savings	337	350	380	410	—	13.15
Corporate Savings	329	412	475	601	1917	16.12
Financial Intermediaries						
Gov't. Financial Institutions	180	220	260	300	960	8.54
DBP	175	210	250	290	925	8.23
Others	5	10	10	10		.31
Non-Gov't. Financial Institutions	280	553	634	714	2381	21.18
Private Development Banks	25	30	35	40	130	1.16
Rural Banks	17	20	25	30	92	.82
Savings Banks	25	3	35	9	13	.11
Non-Bank Financial Institutions	85	100	120	140	445	3.96
Commercial Banks	3505	400	4505	500	1701	15.13
Foreign Investments	625	650	700	750	2725	24.24
Direct	25	40	40	50	155	1.38
Indirect	600	610	660	700	2570	22.86
WORKING CAPITAL REQUIREMENT	592	659	735	825	2811	100
SOURCES OF FINANCING						
Commercial Banks	272	314	360	410	1356	48.46
Trade Creditors	165	180	200	230	775	27.49
Self-financed	155	165	175	185	680	24.75

firms have been even more encouraging. Activity in the stock market during the past few years has helped in the floating of new issues, especially from the mining sector.

Figures on direct investments from personal savings may be traced from both figures on official accounts and those not recorded in official statistics. Recorded annual investment pertains to the paid-up capital of newly registered enterprises plus the increase in existing ones. The problem of estimating the portion which is unrecorded, referred to as "uninstitutionalized", is alleviated by making some assumptions. It has been observed that the average equity position of new enterprises receiving financing from development finance institutions was as low as 25 per cent of total assets. Allowing for others that do not seek financing, the assumption of a 30 per cent overall equity content is not unrealistic. On this basis, the uninstitutionalized savings going to direct investments could reach as much as 13 per cent of total investments.

Corporate savings represent one major source of finance. Leaving aside corporate profits, the major portion of which is distributed as dividends, depreciation charges provide substantial investible funds. A gauge of the magnitude of savings from this source may be based on an assumed depreciation rate of fixed assets. If, for instance, a straight depreciation rate of 10 per cent were consistently applied on fixed asset investments, the total amount of cash provided by this charge in any given year could be roughly equivalent to the total investments made eight or seven years before, depending on the rate of growth of investments in the intervening years. In the Plan, the levels of new investments from this source equal only one-fourth of such an amount. The major portion may be used for such purposes as amortization payments, cash buildup for additional working capital, or resources that go to financial intermediaries.

Financial intermediaries channel other forms of savings into investments. Government financial institutions, principally the DBP, lent out up to 10 per cent of total industrial investments in the past. Projections limit their share to only 8½ per cent, until the DBP is able to sufficiently expand its sources of funds. Private financial institutions, mostly commercial banks, played a heavier role contributing about 21 per cent.

It is assumed that up to 10 per cent of commercial bank loans could be utilized by their clients for capital investment purposes especially for assets which have pay-back periods of one, two or even three years. Roll-overs of balances of short-term accounts are not uncommon, so that financing from this source is highly possible. Down payments on machinery purchases could come from this source too, so that the scope for short-term commercial bank credit for capital investments could be larger than what has been assumed.

C. Financing Policy

Since the capacity of the government and private financial institutions to meet the investment requirements of industry is limited, the appropriate strategy is to coordinate and direct the investment policies and operations to favor industrial priority areas that will generate maximum benefits for the economy. Close cooperation has to be maintained among agencies such as the Board of Investments, the Central Bank, other government financial institutions, and private financial firms. An inter-agency committee will be created to serve as a clearing house and to discuss and identify possible areas of cooperation. This will involve periodic analyses and reviews of the financial resources of government and private financial institutions.

In line with the program's objective of promoting efficiency and growth through the utilization of previously unused capacities, lowest priority will be assigned to business ventures in overcrowded industries with excess capacities. These industries will be denied the use of the lending guarantee and other foreign exchange facilities of the public and private financial institutions for purposes of establishing additional or new capacities, but not necessarily for the procurement of raw materials, spare parts and/or for other working capital purposes. A general checklist of overcrowded industries should be made annually within 30 days after the effectivity of the BOI's Investment Priorities Plan. The findings of the study may also be utilized as a basis for the lending operation of banks to non-BOI industrial projects. In part, the direction of growth of these projects can be generally guided to suit the development program.

CHAPTER 9
Transportation

Transportation, together with communications, serves as the pipeline by which all activities — economic, social and defense — are interlinked and harnessed towards development. A smooth, well-knit transportation system enhances the realization of a more efficient allocation of resources through, among others, manpower mobilization; aids in increasing interactions between and among sectors of the economy; provides the main artery to quick dissemination of knowledge and technology; and, in particular, becomes the most instrumental and attractive advertisement for a successful and aggressive tourism program. Past Philippine economic plans have therefore incorporated, if not emphasized, the transportation sector if only to recognize the contributory character of a modern and developed transportation system towards general development.

1. PROGRAM OBJECTIVES AND NATIONAL GOALS

Under the new revised Plan, the transportation program assumes new heights in carrying out infrastructural support to the attainment of national objectives stressed in Chapter 1. The present program concentrates on the improvement and extension of projects already accomplished during the previous years and the introduction of new networks considered strategic in fulfilling agrindustrial and tourism targets in the short run and responsive development in the longer run.

An extensive transport survey of the Philippines financed by the World Bank was made recently. The present program calls for a total outlay of ₱2,035.76 million and $166.95 million in four years time.

A. SUPPORT TO AGRICULTURE

Transport support to agriculture is confined to the provision of an improved farm-to-market transportation network to help reduce economic costs incurred by the present poor marketing system. Such network will help in the reduction of price discrepancies and in the effective mobilization of agricultural produce from surplus production areas to deficit consumption regions (particularly in rice and corn marketing). Substantial storage expense will be saved if rapid transportation can be made available by the transport program for the quick delivery of perishable agricultural commodities like fresh fruits and vegetables, fish, livestock and meat. Inexpensive transport and low-cost handling facilities needed by intensified local processing of non-perishable agricultural commodities are similarly included in the present program. The processing of logs, for example, into lumber, plywood and veneer requires additional port installations with reasonable storage facilities. Moreover, the program gives high priority to the construction of main roads with a network of feeder roads in areas rich in agricultural production potential, like Cotabato in Mindanao and Cagayan Valley in Luzon.

B. Support to Industry

Major projects included in the present transport program are designed to conform with the general objectives of the industrial sector.

Necessary ports and storage facilities, as well as expanded highway network projects of the transport program, are envisioned to be necessary infrastructural requirements for the projected increase in export activities and the targeted regional dispersal of industries. To bolster mining export activities, for example, construction and repair of roads, wharfs and bridges has been included in the program. The presence, moreover, of main and feeder roads in Visayas and Mindanao, which are at least as workable as those found in Luzon, gives additional incentives for Manila-based firms and industries to open or extend businesses in these two regions.

Industrial trade between and among regions, especially between Manila and other major cities, will be activated by the modernization of the Manila Port System and the improvement of regional ports in the Visayas (Cebu and Calbayog) and in Mindanao (Cagayan de Oro).

C. Support to Tourism

The special emphasis given to tourism under the new Plan calls for the provision of smooth, comfort-

able and adequate facilities for the quick transfer of discriminating tourists, both domestic and foreign, from one place to another.

For foreign tourists, the attraction to visit the Philippines initially entails accessibility of a well-equipped and safe international airport. Part, therefore, of the present transport program is the modernization of the Manila International Airport to accommodate more jumbo jets and the projected increase in passenger traffic.

For both foreign and domestic tourists, availability of transport facilities to known tourist spots appears as an important criterion in propagating tourism. Specifically, this requires safe domestic airports for quick monitoring of passenger airplanes, as well as clean and safe interisland shipping ports in places with no airport a low-cost transport system to tourist spots is also strategic particularly from the viewpoint of domestic tourists.

2. MAJOR COMPONENTS OF TRANSPORTATION: PRESENT STATUS AND PROGRAM TARGETS

A. Highways

1) Present Status

Highway achievements in fiscal years 1967 to 1970 have been notable as compared to earlier years. As shown in Table 9.1, the construction of concrete and asphalt roads, which tremendously increased in FY 1968, gradually decreased in the succeeding years to give a total four-year figure of 1,791 kilometers of concrete road and 2,776 kilometers of asphalt road. As of June 30, 1970, grand total asphalt and concrete roads in the country reached 11,386 kilometers and 3,102 kilometers, respectively (see Table 9.2).

Gravel/feeder roads, on the other hand, did not receive much emphasis in FY 1967 but nonetheless registered a higher growth rate in FY 1970 with a total of 5,812 kilometers achieved from FY 1967 to FY 1970. As of June 30, 1970, feeder roads (earth and macadam) comprised the biggest component of the Philippine road network amounting to 60,184 kilometers or around 80 per cent of the total road network.

Permanent bridges have also been constructed at an increasing pace in FY 1967 and FY 1968. Around 24,131 lineal meters of bridges have been constructed in four years time.

Despite these notable achievements in the past four years, the highway network still proves to be insufficient to meet the needs of the increasing population as well as the four-year Plan national targets. Long distance trunklines which connect Manila to major points of Luzon, namely the Manila North Road, the Cagayan Valley road, and the Manila South Road, are still inadequate. A sparse highway network under poor conditions in the Mindanao area creates high transport costs, thereby hampering farm production and the expansion of new industries.

2) Program Targets

The basic goal of the revised four-year highway program is the provision of a structurally adequate system of primary roads, supported by an extensive network of secondary and feeder roads to meet transport demands from all sectors.

The revised program calls for a peso investment of ₱1,604.10 million to be derived from the Highway Special Fund, Export Tax proceeds, and General Fund, with a foreign exchange component of $77.29 million. It involves the upgrading, using asphaltic or cement pavements, of 5,600 kilometers of existing trunkline and secondary roads; the construction of 5,800 kilometers of developmenntal and feeder roads; and the erection of 19,900 lineal meters of permanent bridges. Table 9.3 summarizes such targets as far back as FY 1970, with corresponding accomplishments.

The program will continue to give special stress on the Pan-Philippine Highway which is financed by a $30 million loan from the Export-Import Bank of Japan. Full implementation of this project was started in 1970 with the creation of a special Presidential Task Force and a Project Office to insure close control over project activities. The project is expected to be completed by FY 1975. A peso counterpart of ₱307 million to be taken from the Export Tax proceeds, Spe-

Table 9.1—PHYSICAL ACCOMPLISHMENTS IN HIGHWAYS, FY 1967-70

	UNITS	FY 1967	FY 1968	FY 1969	FY 1970	FOUR-YEAR TOTAL
Concrete	Kms.	162	625	566	438	1,791
Asphalt	Kms.	240	963	760	813	2,776
Gravel/feeder	Kms.	557	976	855	3,424	5,812
Permanent Bridges	Lineal meters	4,400	6,183	7,247	6,301	24,131

Table 9.2—PHILIPPINE ROAD NETWORK
(As of June 30, 1970)

	KILOMETERS
Earth	19,679
Macadam	40,505
Low type asphalt	7,585
High type asphalt	3,801
Cement concrete	3,102
Miscellaneous	1,042
Total	75,714

cial Funds, and General Revenue/Bond Funds is required by the project which involves the construction of 1,372 kilometers of roads and 5,574 meters of bridges.

Mindanao and Visayas

Three high priority projects in Mindanao, which have been identified in the Philippine Transport Survey, will soon be undertaken with foreign borrowings.

1) the Cotabato-General Santos Road for which the Asian Development Bank recently approved a $10.6 million loan to cover the direct and indirect foreign exchange component of the project cost. The peso counterpart of the project cost is ₱57.3 million, which is to be taken from the Export Tax proceeds. This project involves the improvement of 209 kilometers of road cutting through the rich plains of South Cotabato and connecting two major ports of Mindanao. Tied up with the ADB-financed Cotabato Irrigation Project, the road is expected to boost agricultural production in the region. Detailed engineering work on the project has been completed and actual construction will start by mid-FY 1972.

2) the improvement of the Digos (Davao)-Cotabato Road. Upgrading of this 160-kilometer highway is estimated to cost ₱24.0 million, with $4.6 million as the foreign currency counterpart. Detailed engineering work on this road section was recently undertaken, and an appraisal thereof has been completed by the IBRD. A loan negotiation with that Bank was started in early 1971. Actual construction is proposed to start in FY 1972, to be completed in FY 1974. A total peso counterpart of ₱24.0 million from the Export Tax proceeds is programmed.

3) the Iligan-Cagayan de Oro-Butuan Road, a heavily travelled coastal highway stretching 300 kilometers and joining three of the principal cities of Mindanao. The project, which is proposed for ADB financing for $11.6 million, has high economic feasibility as indicated by a maximum benefit-cost ratio of 26. Detailed engineering work for this road section will soon be undertaken and actual construction is scheduled to start in FY 1973. Of the original first package of projects proposed for ADB financing under the FY 1971-74 Plan, only the Iligan-Cagayan de Oro-Butuan and General Santos-Cotabato roads are seriously under consideration by ADB.

In FY 1974, the improvement of 269 kilometers of trunk roads in Mindanao and the Visayas will be started through a proposed loan from the ADB. This includes the Davao-Digos Road which will link the Pan-Philippine Highway and the Digos-Cotabato Road, the Bacolod North and South Roads, the Cebu North and South Roads, and the Cebu-Toledo Cross-country Road.

The start of improvements on 1,743 kilometers of other major link-roads and subregional networks in the developing areas of Mindanao and the Visayas is also planned. This includes the circumferential road in the Zamboanga peninsula and its connection with Iligan and thence to Cotabato City; the Koronadal Malilalin Road and Sayre Highway in Central Mindanao, the Davao-Surigao Coastal Road in the relatively underdeveloped eastern section of Mindanao, and primary road networks in the islands of Panay, Negros,

Table 9.3—REVISED INFRASTRUCTURE PROGRAM
PHYSICAL GOALS

HIGHWAYS

SUMMARY

PROJECT CATEGORY	PHYSICAL TARGETS		PHYSICAL ACCOMPLISHMENTS		ANNUAL PHYSICAL TARGETS			
	FY 1970	FY 1971	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
a. Concrete Roads, Km.	451	314	438	115	239	339	406	415
b. Asphalt Roads, Km.	420	179	813	289	646	777	1,343	1,455
c. Gravel Roads, Km.) Feeder Roads, Km.)	5,113	810	3,424	634	1,522	1,311	1,478	1,500
d. Bridges, L.M.	4,000	3,016	6,301	4,100	4,930	5,000	5,000	5,000

Leyte, Samar, Cebu, and Bohol. ADB financing of these projects amounting to $30.0 million is envisioned.

Luzon

Apart from the Pan-Philippine Highways, about 1,000 kilometers of primary and secondary roads identified in the Philippine Transport Survey as high-priority networks will be improved. They include the major transportation corridor north of Luzon, i.e., the Manila North Road from Obando to Laoag. Also part of this package are important subregional networks around the principal urban centers and production areas which include road sections of presently low operational efficiency in relation to the heavy traffic loads they carry, viz., the Manila East Road in the Laguna Bay Area, the San Fernando (Pampanga)-Dinalupihan-Olongapo Road in the midwestern Luzon, the Sto. Tomas-Batangas-Cavite-Olongapo Road southwest of Manila, the Tarlac-Sta. Rosa and Gapan-San Fernando (Pampanga) networks in Central Luzon, and the Bugallon-Damortis and Rosario-Bauang Roads in Northwestern Luzon. The benefit-cost ratios of some of these roads are as high as 54. UNDP assistance for detailed studies on the package was sought in 1970 and IBRD financing of the dollar component (about $17.6 million) of the construction cost is proposed. Actual construction is scheduled to start in FY 1973. These Luzon road projects actually constitute the second IBRD package cited in the original four-year Plan, except for the deletion of the Cagayan Valley Road and Manila South Road which are portions of the Japan-assisted Pan-Philippine Highway Project.

A third IBRD package consisting of some 995 kilometers of secondary links and subregional systems in Upper Cagayan, Nueva Vizcaya, Pangasinan-Tarlac, Manila, Bataan and Zambales, eastern Quezon, the Bicol provinces of Albay and Sorsogon, and Mt. Province, is scheduled to follow the second IBRD package mentioned above. This package will require $19.0 million in foreign exchange.

B. AIRPORTS AND AIR NAVIGATION

1) Present Status

Excluding the Manila International Airport (MIA), national airports currently being serviced by the three domestic airlines include 8 trunklines, 24 secondary and 45 feeder airports. With increasing growth in air traffic (estimated as 14 per cent for international, and 10 per cent for domestic, traffic) and projected aircraft modernization, the existing 78 national airports being operated by the government, although quantitatively adequate, appear to be technically deficient in facilities and in the capacity to minimize, if not eliminate, risk to air navigaton. Runways, for example, are of poor clearance and terminal facilities are seldom existent. Moreover, these airports are wanting in navigational aids equipment and aeronautical meteorology. The effects of these deficiencies with respect to the three airline companies are two-fold, namely:

(i) airline companies have to supplement at their own expense facilities which should have been provided by the government.

(ii) considerable losses to the carriers in terms of delays and cancellations of flights as well as damage to airplanes.

2) Program Targets

a) Airport

The program is focused on the rehabilitation and upgrading of existing trunkline and secondary airports to cope with the expected increase in air traffic and to provide the operational safety required by the rapid modernization of aircrafts.

The airport program requires a total peso investment of ₱126.80 million with a foreign exchange counterpart of $27.88 million. The physical goals envision (see Table 9.4) essentially consist of the strengthening of aircraft movement areas through the construction of 1,052,095 square meters of cement concrete pavement, 488.275 square meters of asphaltic concrete pavement, and 91,200 square meters of macadam pavement. For FY 1970 and FY 1971, similar data are matched against accomplishments.

Serving as the core of the program is a package of six trunkline airports and eight secondary airports which are among the high-priority projects recommended in the Philippine Transport Survey Report. These airports were chosen on the basis of (a) the present and future passenger and goods traffic and the economic importance of the hinterlands which the airport will serve, (b) the presence of alternative means of surface transport, (c) the need to provide rapid and efficient public transport service for islands which are distant from the urban centers, and (d) the engineering adequacy of the facilities.

These airports will be improved to meet the standards set by the International Civil Aviation Organization. Work will center on the permanent improvement of movement and parking areas, construction of terminal buildings and control towers, installation of light-

Table 9.4—REVISED INFRASTRUCTURE PROGRAM
PHYSICAL GOALS

AIRPORTS

SUMMARY

PROJECT CATEGORY	PHYSICAL TARGETS		PHYSICAL ACCOMPLISHMENTS		ANNUAL PHYSICAL TARGETS			
	FY 1970	FY 1971	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
a. Concrete Pavements, Sq. M. ...	—	163,343	197,105	137,256	289,245	296,600	246,650	219,600
b. Asphalt Pavements, Sq. M. ...	—	21,000	305,500	33,800	—	—	225,875	262,400
c. Macadam Pavements, Sq. M. ..	—	40,000	253,560	16,050	—	—	91,200	—

ing and drainage facilities, fencing of the airport perimeter, and acquisition of land for these purposes. Among the trunkline airports to be improved are Mactan, Davao and Zamboanga. An application for technical assistance for the feasibility studies of these airports has been submitted to the ADB. Actual implementation is scheduled to start in FY 1972 at the rate of two airports every year.

Emphasis is also placed on the development of the Manila International Airport to meet the needs of the jumbo jets. The strengthening of the MIA runway for this purpose was completed in mid-FY 1971. To fully handle the passenger and freight flows, expansion of the terminal facilities is proposed together with the improvement of other aircraft movement areas. The entire MIA development plan, which is aimed at accommodating traffic growth for the next ten years, will require a five-year investment of ₱25.0 million, to be taken from the MIA Revolving Fund, and a loan component of $10.0 million.

b) Air Navigation

Complementing the airports development program is a four-year plan for the installation of air navigation facilities to ensure safety in aircraft operations. Still on-going is the Civil Aeronautics Administration-Philcox project for the installation of air navigation equipment in 5 major airoprts (Manila, Laoag, Zamboanga, Davao and Cebu) and 37 connecting secondary aerodromes. Work on the project, which is financed with a $12 million foreign loan, is only 27 per cent completed as of mid-FY 1971. The delay is primarily due to inadequate peso funding and to problems in site acquisitions.

The air navigation program requires an investment of ₱63.30 million and a foreign exchange counterpart of $12.72 million. It is expected to result in the installation of 60 aero-communications stations, 17 air traffic control facilities, and 46 navigational aids in strategic locations throughout the country. These targets are summarized in Table 9.5 with corresponding data and achievements for FY 1970 and FY 1971.

C. RAILWAYS

1) Present Status

Philippine railways transport is deplorable. Incomewise, only the 640-kilometer stretch from San Fernando, La Union to Legaspi City out of 1,028 kilometers of single narrow gauge tracks provides the Philippine National Railways with its main source of income. Facilities are of old vintage and need proper maintenance and rehabilitation. Rolling stock consists of only 78 locomotives, 171 motorcars, and 1,733 pas-

Table 9.5—REVISED INFRASTRUCTURE PROGRAM
PHYSICAL GOALS

AIR NAVIGATION

SUMMARY

PROJECT CATEGORY	PHYSICAL TARGETS		PHYSICAL ACCOMPLISHMENTS		ANNUAL PHYSICAL TARGETS			
	FY 1970	FY 1971	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
a. Aero-Communications, No.	—	16	7	1	46	—	10	4
b. Air Traffic Control, No.	—	13	1	—	11	9	3	—
c. Navigational Aids, No.	—	21	1	21	36	3	7	—

senger and freightcars. Some 210 bridges out of 1,950 are temporary structures. Heavy damage brought about by 1970 typhoons further worsened the already deteriorating condition of existing facilities.

2) Program Targets

The railway rehabilitation and modernization program involves the following:

1. Rehabilitation and improvement of rolling stocks, which include locomotive, motor cars, passenger and freight cars, and spare parts.
2. Improvement of the workshops and line sheds for more efficient equipment maintenance and repair work.
3. Rehabilitation and improvement of tracks and structures.
4. Maintenance of railways and equipment.
5. Improvement of signal and electric communications equipment.

A total domestic investment of ₱116.56 million and a foreign exchange component of $19.16 million are required by the program. During the Plan period, 200 kilometers of tracks and 1,800 lineal meters of bridges will be replaced; 10,860 square meters of buildings, sheds and shops will built; 110 units of rolling equipment will be repaired and rehabilitated; and 1,330 kilometers of communication lines will be installed. The targets for the last two years are matched against achievements in Table 9.6, along with aforementioned goals.

D. PORTS

1) Present status

The existing 81 national and 392 municipal ports — which provide the basic facilities of a deepwater anchorage for overside work and/or an alongside berth — proved to be still inadequate to handle increasing maritime traffic. If not poorly distributed throughout the archipelago, these ports lack berthing and storage space, the construction of 18 foreign and domestic berths as well as of 31,974 square meters of warehouses in the past four years notwithstanding (see Table 9.7). Harbor dredging, of which 49.1 million cubic meters were undertaken during fiscal years 1967 to 1970, still needs additional emphasis for easy maneuverability and safe navigation.

The inadequacy of the present public ports structure is demonstrated by the presence of a sizable number of private piers and wharfs owned, equipped, and operated by commercial firms. Most of these private ports are oriented towards handling export and import traffic. For instance, sugar centrals, copra-crushing mills, pineapple growers, flour millers, and petroleum importers have built piers with special pipelines to handle particular commodities more efficiently and cheaply than those general-purpose ports and berths provided by National and Municipal ports.

2) Program Targets

The portworks program will continue to stress the engineering improvement of selected national ports, through adequate berthing and storage facilities and dredging works, to enable them to efficiently handle increases in waterborne traffic and changes in vessel characteristics, and to meet the requirements of regional development.

Investment requirements for portworks have been raised significantly due to the marked increases in the revenues accruing to the Portworks Special Fund resulting from increased export activities. The revised program involves a total local currency investment of ₱125.0 million, of which ₱100.8 million is from the Portworks Special Fund and ₱14.2 million is from the Export Tax proceeds. A foreign exchange counterpart of $29.90 million is also required.

The physical targets of the revised program have consequently been increased (see Table 9.8). The pro-

Table 9.6—REVISED INFRASTRUCTURE PROGRAM
PHYSICAL GOALS

RAILROAD

SUMMARY

PROJECT CATEGORY	PHYSICAL TARGETS		PHYSICAL ACCOMPLISHMENTS		ANNUAL PHYSICAL TARGETS			
	FY 1970	FY 1971	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
a. Track Replacements, Km.	—	—	—	—	—	57	72	72
b. Bridge Repairs, L.M.	—	—	—	—	—	1,269	157	380
c. Bldgs, Sheds, Shops, Sq. M. ...	—	—	—	—	—	2,653	4,446	3,762
d. Rolling Equipment, No.	—	—	—	—	—	51	25	33
e. Commo. Lines, Kms.	—	—	—	—	—	522	456	356

Table 9.7—PHYSICAL ACCOMPLISHMENTS IN PORTWORKS
FY 1967-70

	UNITS	FY 1967	FY 1968	FY 1969	FY 1970	FOUR-YEAR TOTAL
Foreign Berths	No.	9	8	1	—	18
Domestic Berths	No.	30	12	18	18	78
Reclaimed Port Area	Has.	0.4	0.2	7	43.7	51.3
Warehouses	Sq. M.	5,708	14,626	8,650	2,990	31,974
Causeway Bulkheads	Lin. M.	1,672	2,950	4,526	7,044	16,192
Harbor Dredging	Million Cu. M.	13.4	17.0	11.4	7.3	49.1
Seawalls	Lin. M.	479	629	2,106	4,444	7,658

Table 9.8—REVISED INFRASTRUCTURE PROGRAM
PHYSICAL GOALS

PORTWORKS

SUMMARY

PROJECT CATEGORY	PHYSICAL TARGETS		PHYSICAL ACCOMPLISHMENTS		ANNUAL PHYSICAL TARGETS			
	FY 1970	FY 1971	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
a. R.C. Piers/Wharfs, Sq. M.	—	—	n.a.	5,112	16,341	9,200	12,442	14,000
b. Timber Piers/Wharfs, Sq. M. ..	—	—	n.a.	1,191	2,808	1,359	1,997	2,600
c. Reclaimed Port Area, Has. ...	41	15	43.7	0.7	—	27	6	20
d. Warehouses, Sheds, Sq. M.	28,512	1,680	2,990	180	5,882	13,030	9,112	9,500
e. Causeways, Bulkheads, L.M. ...	5,662	6,470	7,044	4,457	2,854	2,755	2,779	3,200
f. Dredging, Cu. M. (10^3)	2,300	6,000	3,300	4,590	7,100	6,600	7,600	8,240
g. Sea Walls, L.M.	—	3,858	4,444	1,354	8,000	4,000	10,000	8,000

n.a.: Not available

posed investments are expected to result in the provision of 56,740 square meters of piers and wharves, the reclamation of 45 hectares of port area, and the construction of 36,500 square meters of warehouses and cargo sheds. Some 12 kilometers of causeways and 30 kilometers of seawalls will be built, and deepening of harbors involving 30 million cubic meters will be accomplished.

a) Project Coverage

About one-third of the investments will be channeled to the Manila Port system, which is the country's main transshipment point presently handling 85 per cent of the country's main imports and 15 per cent of its exports. To meet the advent of containerization, the marginal wharf will be strengthened, and containerized cargo-handling facilities will be provided through a proposed German loan. Completion of the international port is likewise planned to cope with future foreign traffic demand. In the North Harbor, Pier 16 will be improved and the marginal wharf will be expanded to meet domestic shipping traffic.

To support the Manila Port system, a network of improved regional ports is also envisioned in the program to ensure the effective handling of shipping traffic and to enhance economic activities in the hinterlands. In Mindanao, Cagayan de Oro in the North will have an additional berth and General Santos in the South will be provided with two berths and additional storage facilities. A new maritime port is proposed in Cotabato City and an overseas berth is planned in Davao (Sasa). Berthing and storage facilities will also be improved in Iligan, Butuan and Cotabato.

In Luzon island, Tabaco, a port of entry servicing the Bicol region, will be provided with an additional overseas berth. Batangas, another port of entry serving Batangas, Quezon, and Mindoro, is programmed to have additional overseas and domestic berths in conjunction with the planned industrial growth of the area which is favored by its proximity to Manila.

The busy ports of Cebu and Calbayog are likewise proposed for improvement to handle the shipping traffic growth in the Visayas.

b) Project Financing

Negotiations for a $5.25 million loan with the German government for the ports of Manila, Davao and Iligan are still underway. Improvements of these

ports, which require a peso counterpart of ₱18.5 million, will be undertaken from FY 1973 to FY 1975.

An IBRD loan of $10.6 million (with a local counterpart of ₱22.9 million) was recently sought for the Ports of Tabaco, Batangas, Cagayan de Oro, and General Santos. The loan will include feasibility studies of the ports prior to actual construction which is scheduled to start in FY 1973.

An application for a loan (including feasibility studies) to cover the foreign exchange cost (approximately $4.4 million) of the Ports of Butuan, Calbayog, Cebu, Cotabato and Zamboanga has been submitted to ADB. Construction of the ports will take three years starting in FY 1973. Local cost will amount to ₱15.40 million.

c) Fisherman's Wharf

Also envisioned in the program is the construction of the Navotas Fishing Port to be financed with a $5.5 million loan from ADB and a peso counterpart of ₱18.0 million. Completion of the project will boost the government fish production program through reduced handling and marketing costs. Construction started in FY 1971 and is planned to be completed in three years.

CHAPTER IO
Power and Electrification

The availability of electric power is invariably associated with high economic productivity. Where this commodity is available, progress is manifested in the establishment and growth of manufacturing and industrial concerns. Where electric power is absent, the traditional form of agricultural development persists. The provision therefore of cheap, adequate, and dependable electric power remains a major infrastructured objective in line with the national goal of establishing agrindustrial balance.

1. PRESENT STATUS

A. Electric Demand

The demand for electric power has been increasing quite rapidly. Studies show that from 1960 to 1969, electric consumption increased by 288 per cent or by almost threefold. Considering that population increased by only 12 per cent, it can be implied that electric consumption is increasing about 24 times as fast as population. A 13 per cent average load growth for the entire country as borne out by recent studies on load requirement gives credence to such a rapid growth in the demand for electricity.

B. Supply

Much is still desired in the provision of electric power in the country. From the population point of view, only 7.5 million people are benefited by electric service. Of these 7.5 million, 6 million or 80 per cent reside in the Manila and Suburbs area, leaving only 1.5 million rural dwellers to enjoy the benefits of electricity.

Electric power in the country is supplied by the National Power Corporation (NPC) by privately-owned utility systems, and a number of municipal plants. Of the 14.3 per cent average annual rate of increase of generated energy in the past sixteen years (1954-1969), the NPC generated 33.7 per cent and the Manila Electric Company (MERALCO), 56.7 per cent. The remaining 9.6 per cent was generated by other privately-owned and local government-owned utilities. In 1969, the combined capacity of all these electric power supply systems came up to 1,754.5 Mw. Of this total, 585.5 Mw. came from NPC generating facilities, 990 from MERALCO, 172 from independent generating systems owned by small operators, and 7 Mw from municipal utilities.

1. Government Organizations

a) National Power Corporation (NPC)

The main effort of the government in the power and electrification program is being undertaken by the NPC. Its main task is to develop potential power sources and to transmit the power generated to serviceable areas. An integration of power generation plans coordinating NPC plans with other generating capacities is also a major part of the power program.

(1) Luzon

(i) The Luzon Grid

The Luzon Grid consists of the interconnected network of power stations and complementary transmission and transformation networks of the NPC and the MERALCO. The Grid serves 256 cities and municipalities, 27 industrial and mining companies, and 38 other utilities. At the end of FY 1970, there were 187 power customers being served by the Luzon Grid.

A meaningful planning of the power generation requirements of the Luzon grid depends on a coordination of the generation plant capacity build up for the region. This implies an agreement between the NPC and MERALCO on the nature of power generation, if the grid is to engage in an orderly expansion of electric power capacity with a view to striking at major economies of scale to be derived from integrated plants. This agreement is presently in the negotiation process.

Another important aspect of planning power is to strengthen the financial capacity of the NPC to service its obligations as well as earn an economic rate of return. This question is, of course, related to appropriate pricing of the rates of power. The possibility of raising these rates can be justified by the fact that NPC power rates are relatively low to utility franchise holders and the fact that windfalls have, in effect, been created by the government corporation to private franchise holders. The next step is to resolve an equitable sharing of the benefits between the

corporation and its direct distributors, without necessarily seriously affecting the rates at the end-user side, the ultimate power consumer.

(ii) Generation Plans

There are four large hydroelectric stations currently serving the Luzon Grid, namely, the Caliraya, Ambuklao, Binga, and Angat plants. In addition, there is in Luzon a sub-grid in the Ilocos provinces with a total capacity of 2.9 Mw in two diesel electric plants and two other sub-grids in the Bicol region with a total capacity of 2.2 Mw in two small hydroelectric plants. The Ilocos sub-grid is now in the process of interconnection with the Luzon Grid.

(iii) Transmission Lines

Transmission lines operating at voltages of 230, 115, 69, 34.5, 23, and 13.8 Kv have been maintained by the NPC to transmit and distribute power in the Luzon area. As of June 1970, the Luzon Grid had a total of 2,353 kilometers of transmission lines broken down as follows:

VOLTAGE (KV)	LENGTH (KM.)
230	481
115	198
69	683
34.5	100
13.8	891
TOTAL	2,353

(2) Mindanao

Four generating units of the Maria Cristina Plant with a combined nameplate rating of 150 Mw currently provide power generation in the Mindanao area. Six 69 Kv transmission lines — one at Marawi City, another at Camp Overton in Iligan City, and still another at Carmen, Cagayan de Oro City — deliver the generated power. Two lines serve the Iligan Integrated Steel complex and the third transmits power to the Floro Cement Plant at Lugait.

b) National Electrification Administration (NEA)

Created by R.A. No. 6038, the NEA is the lending institution authorized to pursue the power program with a special target of complete rural electrification for the country in 20 years.

In eight years' time, the NEA hopes to have achieved some semblance of a "backbone" power system which features the completed grids in Luzon and Mindanao and fully-integrated electrical systems in the Visayas. However, for purposes of the four-year Plan, immediate targets will focus on the establishment of one electric cooperative system for every province within the Plan period. To achieve this objective, the concept of "area-coverage" has been introduced into the power development program.

Essentially, "area-coverage" only means that electric service will be extended to all prospective consumers in a franchised area as long as the financial feasibility of the entire operation is not impaired.

The concept is novel in the sense that past rural electrification programs were characterized by small generating units serving only one poblacion during the hours between dusk and midnight, usually for lighting purposes only. As a consequence, industry hardly had any chance to develop.

The new approach will have to involve larger power plants to be able to service 5-10 municipalities on a 24-hour basis. Thus, the coverage schedule will be launched in stages — first, to areas of thicker population densities, then outwards to more isolated communities. The intent is to develop large enough systems so that the more progressive segments would help absorb the costs of providing service to the more remote customers.

To expedite these goals, the agency will extend loans to public service entities, preferably cooperatives, for exclusive use in the construction of electric generator plants, transmission facilities, and distribution sys tems. Such loans will bear very low interest rates with generously extended payment periods.

Also, for purposes of implementing a more orderly power program, the NEA has adopted definite policies governing the selection of areas to be developed each year, the determination of the specific projects to be undertaken in the selected areas, and the feasibility criteria against which loan applications will be gauged.

Because presently appropriations for such loans appear limited, project applications will be assessed on the basis of the following criteria:

a) financial feasibility; response of local citizenry concerned; availability of technical and managerial manpower;
b) potential impact on regional economic development; and
c) type of project involved.

The agency has been able to establish two model cooperatives — Misamis Oriental Electric Services Cooperatives (MORESCO) and the Victorias Rural Electric Service Cooperative (VRESCO). It has also conducted two seminars on rural electric cooperatives.

More rural electric cooperatives are being planned and feasibility studies for rural electrification are in progress. The objective of these feasibility studies is to allow a wider distribution of electricity to rural areas under the aegis of a cooperative organization.

c) Local Government

Local governments are also engaged in the generation and purchase of electric power for distribution within their political boundaries. There were 121 local government-owned utilities servicing 132 towns and cities at the end of 1970. These are mostly small companies with maximum capacities of only about 25 Kw and substandard management and insufficient capital.

d) Power Development Council

The coordination of the power and electrification program is of such importance that the Government created the Power Development Council under R.A. 6038. This Council is called upon to adopt an integrated plan of electrification and power development, to coordinate the activities and operations of all sectors involved in electrification, and to recommend policy measures necessary to achieve the objectives of the program.

2. Private Organizations

a) Manila Electric Company (MERALCO)

MERALCO joins the NPC in providing electric power in the Luzon area. Its principal sources of power are its thermal stations, augmented by the purchase of substantial blocks from the NPC's hydro-stations. Its aggregate capacity of 1210 Mw provides service to 7 cities and 37 towns in 5 provinces.

Meralco's generating stations at present are as follows:

Botocan Hydro	15 Mw
Blaisdell thermal	37 Mw
Rockwell	333 Mw
Tegen thermal	220 Mw
Gundues thermal	385 Mw
Sorydes thermal, Unit 7	220 Mw
TOTAL	1,210 Mw

The future generating capacity of MERALCO depends critically on the integration of the power planning between NPC and this private utility corporation.

b) Philippine Electric Plant Owners Association (PEPOA)

There are 184 private electric plant owners that comprise the PEPOA. These owners serving 303 municipalities and cities with a total capacity of 151,156 Kw. represent 40 per cent of the 355 private electric utilities.

c) Other Private Utilities

Around 151 non-PEPOA members representing 23 per cent of the total number of electric utilities are currently serving 176 towns and cities with a total capacity of 20,925 Kw. Most of these utilities are substandard and render only 8-12 service.

2. THE FOUR-YEAR POWER AND ELECTRIFICATION PROGRAM

A. Objectives of the Program

The power and electrification program for the four-year period FY 1972-75 involves total investments amounting to ₱455.70 million and $129.42 million Of these amounts, ₱363.74 million and $96.02 million is programmed for the development of power plants and transmission lines of the NPC while ₱92.00 million and $33.40 million is allocated for the rural electrification program of the NEA.

In terms of physical goals during the next four years, power generating capacities of about 278 Mw and 2,584 kilometers of transmission lines of various Kv's will be installed (see Table 10.1). For rural electrification, around 186 powerhouses, 193 generating units, and 193 transmission systems will be built (see Table 10.2).

Both the investment requirements and physical goals established above are meant to reflect various policy questions that come up as a result not only of the inadequacy of electric supply but also of the necessary consistency with the national goals required of the power infrastructure.

Considering the high capital intensiveness of the electric power industry, as well as the number and locations of government agencies and private operators engaged in the industry, the coordination and integration of all efforts becomes necessary in order to eliminate waste and maximize the generation and utilization of electric power. Emphasis must thus be placed on operational tie-ups (e.g., maximum utilization of NPC's transmission lines by the NEA) and the synchronization of productivity schedules that jibe with the requirements of the other sectors of the economy.

Table 10.1—REVISED INFRASTRUCTURE PROGRAM
PHYSICAL GOALS

POWER

SUMMARY

PROJECT CATEGORY	PHYSICAL TARGETS		PHYSICAL ACCOMPLISHMENTS		ANNUAL PHYSICAL TARGETS			
	FY 1970	FY 1971	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
a. Power Generation, MW	50	75	—	—	125	—	—	200
b. Power Transmission, Kms.	257	456	190	110	592	397	795	800

Table 10.2—REVISED INFRASTRUCTURE PROGRAM
PHYSICAL GOALS

RURAL ELECTRIFICATION

SUMMARY

PROJECT CATEGORY	PHYSICAL TARGETS		PHYSICAL ACCOMPLISHMENTS		ANNUAL PHYSICAL TARGETS			
	FY 1970	FY 1971	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
a. Powerhouses, No.	—	17	—	n.a.	72	37	37	40
b. Generating Units, No.	—	42	—	n.a.	73	37	38	45
c. Transmission System, Kms. ...	—	86	—	n.a.	73	37	38	45

n.a.: Not available

B. Balance and Structure of Hydro-Thermal-Nuclear Plants.

In the past, the NPC has been handicapped in selling available hydro capacity due to the unreliability of its supporting energy supply. This has provided justification for NPC's construction of thermal plants to enable the corporation to adequately supply the electricity demands of any utility or any power-intensive industrial load-user within the Luzon Grid. However, in view of rising costs of imported fuel for oil-fired plants, the question of attaining a proper balance in the number of hydro, thermal, and nuclear plants in the near future deserves immediate attention. The economic feasibility of establishing nuclear power plants is being investigated. An updating of the UN-sponsored feasibility study on the subject, undertaken in 1965, is currently being planned under another UN technical assistance program. This will bring up to date the cost figures and the future alternatives with respect to nuclear power plants and other alternative energy sources.

C. Regional Dispersal of Power Plants

In conformity with the avowed national objective of promoting regional development, the four-year power and electrification program calls for the construction of power, transmission, and distribution lines in strategic regions.

Luzon

With regard to additional power plants, the NPC plans to install the following:

(a) **Bataan Thermal Units No. 1 and No. 2**

Started in 1969, Bataan Thermal No. 1, with a capacity of 75 Mw, is scheduled for operation by the early part of FY 1972. Scheduled to be started in FY 1972 and completed by FY 1975 is Bataan Thermal No. 2 with a capacity of 150 Mw.

(b) **Thermal Unit No. 3**

One additional thermal unit with a capacity of 200 Mw is being planned to provide back-up energy for NPC's hydro capacity in Luzon. Location surveys for the proposed project are underway. For economic and technical reasons, the unit will probably be located in Batangas. The completion of this unit will attain for the NPC the desirable hydro-thermal capacity ratio of 6:4. It should be in stream by 1976.

(c) Other projects on tap are the Upper Pampanga River Project (power phase) and the 350 Mw Cali-

raya Pump Storage Hydroelectric Project. Both projects are presently under study.

(d) Geothermal Energy

Negotiations are currently in progress between NPC and Union Oil of California for the latter to explore, tap and deliyer geothermal steam at Tiwi, Albay for conversion by NPC into electric energy.

The transmission lines program of the NPC for Luzon includes the following:

(1) Ilocos Region Electrification Project (Phase II) involving the extension of the existing 69-Kv line from Ambuklao to Bacnotan, La Union;

(2) Angat-Caliraya Tie Line that would connect the Caliraya plant to the northern stations by means of an 85-Km. tie line of 230-Kv capacity;

(3) Southern Luzon Electrification Project (Stage I) that would extend services to Southern Luzon provinces by the construction of a 50-Km. transmission line from the Caliraya plant to Gumaca, Quezon;

(4) Laguna-Batangas Electrification Project (Phase II) involving the extension of services to remaining unserviced towns in Batangas province;

(5) Zambales Electrification Project designed to meet the growing demands of the province; and

(6) Central Luzon Electrification Project (Phase II) involving the strengthening of certain existing facilities and the extension of service to other towns in Tarlac and Pangasinan.

Of major policy interest in power distribution is the probable smooth and complete integration of the development programs for the Luzon Grid by the NPC and MERALCO. At present, an energy feedback arrangement exists between the two agencies whereby the Ambuklao-Binga-Angat plants of NPC supply power to MERALCO during the rainy season and MERALCO supplies power to NPC during the dry months when the reservoirs of the latter's hydroelectric plants are low. This scheme will be further developed with the inter-connection of the Angat-Caliraya tie line with MERALCO's Montelibano Thermal Plant on the tie line's route. Improvements in the relationship between NPC and MERALCO along the objectives of planning the Luzon Grid distribution system is therefore highly needed, if only to help realize costs minimization for both corporations.

Mindanao

(a) Maria Cristina Unit No. 5

This 50 Mw unit will bring the Maria Cristina Hydroelectric complex into its full generating capacity of 200 Mw. This additional capacity will enable the plant to supply the power needs of Iligan, Cagayan de Oro and Marawi cities up to 1974. Construction of MC Unit No. 5 is scheduled to be started in late 1971 and completed in June, 1974.

(b) Agus River No. II

This project consists of 3 units at 60 Mw each and has an estimated cost of ₱83.90 million and $18.10 million in foreign loans.

Complementning the construction of generating plants is the development of transmission lines. In this connection, the Mindanao Electrification Project will be implemented as follows:

(a) Four major transmission lines (138 Kv) with a total length of approximately 834 Km. from the Agus River generating facilities to: (1) Tagaloan (109 Km.) and then Butuan (110 Km.); (1) Davao (215 Km.); (3) Cotabato (85 Km.) and General Santos (206 Km.), tapping off the Davao line near Bubong; and (4) Aurora (109 Km.).

(b) Sub-stations of 138 Kv at seven principal loan centers, namely: Lugait, Tagoloan, Butuan, Davao, Cotabato, General Santos and Aurora.

(c) Sub-transmission lines of 69 Kv radiating out from various 138 Kv sub-stations, to supply power to nearly industries and cities/towns. Total length of these lines will be approximately 409 kilometers.

D. Rural Electrification

Considering the geographical composition of the country, the task of providing electricity to the rural areas is more suitable to the purposes and objectives of the NEA. The NEA hopes to achieve this goal through the establishment of electric service cooperatives. With heavy reliance on foreign aid for its funding, the aim of the NEA is to link and integrate such cooperatives with the transmission systems of major power plants within their particular areas so as to minimize costs and make optimum use of available power sources. Each of these cooperatives will be an integrated system designed to provide electrical service to 5-10 municipalities or an average of 200,000 people per system.

On the side issue of the paying-ability of non-industrial consumers in the rural areas, generated power will enable such users to gainfully employ an estimated four months of idleness, in household or cottage activities with which to pay electric bills and further augment farm income.

The priorities in the organization of electric service cooperatives have been oriented in areas with potential for pump irrigation and farm mechanization, for cottage industries, and for agrindustrial activities. In its totality, therefore, the success of the NEA's program will mean an acceleration in the standard of living of people in the rural areas. As such rural electrification has been designated as one of the presidential priority programs. To assure success of this undertaking, feasibility studies will be conducted by the NEA in conjunction with the U.S. AID. For FY 1972-75, the NEA plans to establish 186 powerhouses, 193 generating units, and 193 transmission systems, involving expenditures of ₱92.00 million and $33.40 million (cf. Tables 10.2 and 10.3).

Table 10.3—FOUR-YEAR POWER AND ELECTRIFICATION PROGRAM
INVESTMENT REQUIREMENTS, PHYSICAL GOALS
FY 1972-75

PROJECT	FOUR-YEAR TOTAL	FY 1972	FY 1973	FY 1974	FY 1975
I. *Investment Requirements (In Millions)*					
Total: Power and Electrification	₱455.70	86.50	98.94	152.01	118.25
	$129.42	32.20	24.62	41.76	30.84
A. Power Plants and Transmission Lines	₱363.74	68.54	79.94	127.01	88.25
	$96.02	3.80	24.62	36.76	30.84
B. Rural Electrification	₱92.00	18.00	19.00	25.00	30.00
	$33.40	28.40	—	5.00	—
II. *Physical Goals*					
A. Power Plants and Transmission Lines					
1. Power Generation (Mw.)	278	78	—	—	200
2. Power Transmission (Kms.)	2,584	592	397	795	800
B. Rural Electrification					
1. Powerhouses (No.)	186	72	37	37	40
2. Generating Units (No.)	193	73	37	38	45
3. Transmission System (No.)	193	73	37	38	45

Table 10.4—NPC FOREIGN LOAN UTILIZATION AND PESO COUNTERPART
FY 1972-75 (In million ₱/$)

	FOUR-YEAR TOTAL UP TO FY 1975	FY 1972	FY 1973	FY 1974	FY 1975
Power Plant and Transmission Lines					
a) Luzon Grid					
1. Bataan I	₱ 7.31	7.31	—	—	—
	$ 0.13	0.13	—	—	—
2. Bataan II	₱31.50	8.98	10.00	10.20	2.32
	$19.22	—	4.27	7.62	7.33
3. Thermal 3	₱30.40	—	—	13.40	17.00
	$ 8.76	—	—	3.25	5.51
4. Irep-Clep-Lag-Bat-Zam	₱26.32	17.13	7.42	1.77	—
	$ 5.36	1.35	3.43	0.58	—
5. Southern Luzon Stage I	₱21.95	7.47	7.61	6.87	—
	$ 2.91	—	2.27	0.64	—
6. Southern Luzon Stages II & III	₱25.85	—	9.28	11.60	4.97
	$ 5.12	—	1.47	2.87	0.78
7. Caliraya Pumped Storage	₱18.00	—	—	8.00	10.00
	$ 3.00	—	—	1.00	2.00
8 Tiwi Geothermal	₱12.00	—	3.00	5.00	4.00
	$11.50	—	2.50	4.00	5.00
9. Ligao Diesel	₱ 1.70	1.70	—	—	—
	$ —	—	—	—	—
10. Angat-Caliraya Line	₱ 0.19	0.19	—	—	—
	$ —	—	—	—	—
11. San Miguel	₱ 0.10	0.10	—	—	—
12. Olongapo-Bataan Area	₱ 5.10	5.10	—	—	—
Sub-Total Pesos	₱180.42	₱47.98	₱37.31	₱56.84	₱38.29
Dollars	$56.00	$ 1.48	$13.94	$19.96	$20.62
b) Mindanao Grid					
1. Agus VI (MC-5)	₱17.78	4.70	10.66	2.42	—
	$ 3.45	0.80	2.07	0.58	—
2. Transmission Lines	₱75.97	1.80	15.19	34.19	24.79
	$19.95	—	4.99	8.98	5.98
Agus II	₱82.41	6.90	16.78	33.56	25.17
	$18.10	1.50	3.62	7.24	4.24
4. Talomo 4	₱ 0.81	0.81	—	—	—
	$ —	—	—	—	—
5. MC-4 Lake Regulation	₱ 6.35	6.35	—	—	—
	$ 0.02	0.12	—	—	—
Sub-Total Pesos	₱183.32	20.56	42.63	70.17	49.96
Dollars	$ 40.02	2.32	10.68	16.80	10.22
GRAND TOTAL PESOS	₱363.74	68.54	79.94	127.01	88.25
DOLLARS	$ 96.02	3.80	24.62	36.76	30.84

CHAPTER II
Telecommunications

As an infrastructural component of the entire four-year Plan, telecommunication service, like the transportation sector, is a major support to many economic activities in the country. Telecommunciation is complementary to transportation and acts as a substitute in special circumstances. This service is of no minor importance considering the topography and archipelagic character of the Philippines where most major areas of economic activities tend to be isolated by transport scarcity and by long stretches of water.

1. PRESENT STATUS

A. Telecommunication Bureaus

Present Philippine telecommunication demands are being serviced by a government agency — the Bureau of Telecommunications (BUTEL) — and a multitude of private communication firms. The BUTEL operates 1,318 telegraph stations in different municipalities throughout the country and 27 telephone exchanges with a total of 28,500 lines. Various private communication firms (like RCPI, Telefast, and the PT & T) operate 300 telegraph stations which mostly run along routes parallel to those of the BUTEL while several other private companies (e.g., PLDT and Republic Telephone Company) provide 171,500 telephone lines from 48 telephone exchanges.

B. Past Philippine Telecommunication Development

The development of Philippine telecommunication services has not kept pace with Philippine economic development and with the development of telecommunication in other Asian countries. From 1955 to 1966, the GNP increased by 120 per cent, and in this span of time the number of telephones rose by only 88 per cent. This has led to a 4.2 utilization factor (the number of telephones for $100,000 of GNP) for the country which is far lower than the 8 utilization factor recommended as the development target for developing countries in the ECAFE region. The Philippines has a population density of 0.50 per 100 people which, again, falls below the density figures of South Korea and Taiwan, which are economies comparable to the Philippines in point of development stage (see Table 11.1).

Policy Areas

Indiscriminate granting of franchise and the resultant lack of a flexible, integrated and complete network of telecommunication services have been the major bottlenecks confronting Philippine rapid telecommunication development.

Such franchise grants have led to two complementary problems, namely:

1) the undue concentration in large important cities of privately operated communication links leaving the government solely responsible for the telecommunication services in the provinces and barrios with low population density.

2) the duplication of backbone routes which run parallel to each other along the commercial regions. The large investment franchise requirement in constructing backbone routes forces competitive firms

Table 11.1—TELEPHONES IN SELECTED ECAFE COUNTRIES

COUNTRY	NO. OF TELEPHONES 1967	1969	% INCREASE	DENSITY PER 100 PEOPLE (1966)	UTILIZATION FACTOR (1966)
Burma	19,602	22,080	12.6	0.10	1.50
Ceylon	61,791	57,598	(6.8)	0.38	2.92
China, Taiwan	167,825	280,192	67.0	1.32	6.40
India	766,000	1,057,193	38.0	0.18	1.78
South Korea	191,012	489,912	156.5	0.96	6.90
Pakistan	115,356	176,811	53.3	0.13	1.33
Philippines	151,593	241,496	59.3	0.50	4.20
Thailand	65,191	114,419	75.5	0.25	2.00
Japan	9,712,000	20,525,211	111.3	14.18	19.00

tc construct cheap, narrow band, and unstable systems in order to survive competition. Construction of parallel local and national networks and necessary interworking switching facilities, without necessarily giving the country flexible telecommunication services, foments wastage of capital resources.

Only an integrated telecommunication network can scientifically solve these deficiencies. Integration in the present context implies the use of broad-band long distance systems. Prior to the growth of long-distance telephone service, for example, allotting franchise to a single company in one city for development purposes can be efficient. The advent, however, of long-distance telephone systems and other developments like the introduction of communication satellites negate the old notion of considering provinces and cities as self-contained telephone areas. Thus, the whole country has now become one continuous telephone area and should be taken as such for orderly planning and development. Otherwise, fragmentation of responsibilities, as has happened of late, could result in an unnecessary waste of resources, inefficiency, and delay in development.

More specifically, therefore, integration requires the use of a modern coaxial cable system and/or micro-wave radio relay system. These broad-band telecommunication systems provide thousands of telephone channels, television relay channels and radio broadcast channels on a single route. Such development will make it possible for all uses of telecommunication services to share the advantage and facilities of an integrated national network.

2. FOUR-YEAR TELECOMMUNICATION PROGRAM

The long-range telecommunication program embarked upon by the government precisely seeks to integrate the present fragmented patterns of government and private communication services marked by duplication of backbone routes and use of equipment of widely ranging types of manufactures, with the assistance of the Telecommunication Development Board (TDB) created in 1968 under Presidential Order No. 130 and its executive organ, the National Telecommunicatoin Planning Centre (NTPC), etsablished in 1970. The program currently envisaged entails a total investment of P107.50 million in local cost and a foreign exchange component of $46.57 million. It calls for projects which will provide a nationwide network of telegraph and telephone facilities that will complement private communication services. Some of these projects are:

(1) the completion of the Nationwide Telecommunication Expansion and Improvement (NTEI) project which remains as the core of the program.

(2) the start of the Mindanao Telecommunications Development Project.

(3) the completion of the Reparations Telephone Expansion Project.

(4) the start of the Government Telephone System Expansion Project.

Table 11.2 depicts the physical targets from FY 1970 to FY 1975 and the physical accomplishments for FY 1970 and FY 1971.

A. Nationwide Telecommunications Expansion Project (Phase I and Phase II)

The on-going Phase I of the NTEI project, which will provide the primary nationwide network of telephone and radio communication with fully automatic telegraph relay systems for Luzon and the Visayas, was 92.6 per cent completed as of the end of FY 1971 and is expected to be completed this FY 1972. Already operational are the switching centers at Manila, Baguio, Cebu, and Cagayan de Oro, 23 telephone exchanges, 19 VHF/UHF radio stations and 7 micro-wave stations, while work is in progress in 12 other stations. Phase II of the NTEI project, which will expand NTEI's multiplex capacity from 100 channels (under Phase I) to a maximum of 200 channels in the North and Bicol-Southern Tagalog micro-wave links and to 132 channels for the Tagaytay-Cagayan de Oro troposcatter network, is scheduled to start in FY 1973 and expected to be completed in FY 1975. Phase II will cost P46.4 million and $32.26 million.

B. Mindanao Telecommunication Project

The Mindanao Telecommunication Development (MTD) Project will modernize and develop telecommunications facilities in Mindanao and integrate it to the NTEI network. High-quality radio lines using multi-channel microwave and UHF/VHF radio equipment will interlink cities and provincial capitals, telex facilities will be established in five major cities, fully automatc telephone systems will be installed in 16 provincial capitals to permit long-distance dialing, and the whole Mindanao system will be made accessible to the NTEI network through the Cagayan de Oro switching center. The MTD project will cost P17 million and $10.5 million. The feasibility study for this project was completed in 1968 and detailed engineering studies will soon be undertaken.

C. Reparations Telephone Expansion Project

The Reparations Telephone Expansion Project, which aims to expand the government telephone services in Metropolitan Manila, is now 99 per cent completed. All of the 8 automatic telephone exchanges including one tandem office in the Greater Manila area are now operating. Each exchange has 1,500 lines and can accommodate 20,000 subscribers and 800 trunk facilities to private exchanges. On the other hand, the proposed Government Telephone System Expansion Project, originally proposed to be undertaken in FY 1971, is being deferred until FY 1972 due to the difficulty in securing the necessary funding for the project. This expansion project will provide 48,000 additional lines and 500 trunks to the existing exchanges and the 8 recently established telephone exchanges in Greater Manila.

Likewise programmed is the extension of telegraph facilities which would involve the extension of radio-telegraph, wire-telegraph, and telephone-telegraph services to small- and medium-sized municipalities which do not have communication facilities. Some 100 stations will be established from FY 1972 to FY 1975.

Table 11.2—REVISED INFRASTRUCTURE PROGRAM
PHYSICAL GOALS

TELECOMMUNICATIONS

PROJECT CATEGORY	PHYSICAL TARGETS		PHYSICAL ACCOMPLISHMENTS		ANNUAL PHYSICAL TARGETS			
	FY 1970	FY 1971	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
a. NTEI, 1st Phase, %	15	14	10.1	6.4	—	—	—	—
b. NTEI, 2nd Phase, %	—	5	—	—	—	30	28	42
c. Reparations Project, %	—	—	—	—	—	—	—	—
d. GTS Expansion, %	n.a.	100	7.2	—	—	—	—	—
e. Telegraph Stas. %	n.a.	20	25	—	25	25	25	25
f. MTD, %	—	—	—	—	—	25	28	47

	FY 1972	FY 1973	FY 1974	FY 1975	FOUR-YEAR
Investment Requirements (In millions) ...	₱16.50	26.00	30.00	35.00	107.50
	$ 5.80	12.90	12.04	15.73	46.47

n.a.: Not available

CHAPTER 12

Water Supply and Sewerage

1. PRESENT STATUS

As of FY 1970, only about 16.9 million people benefited from adequate and clean drinking water, of which 3 million are being serviced by the Manila and Suburbs Waterworks System, which is considered the biggest and most expensive waterworks in the country. A combined population of 7.45 million outside the Greater Manila Area, inhabiting 51 cities, 613 municipalities and around 1,290 barrios, gets its water needs from 1,349 waterworks systems in operation. In addition, some 20,600 artesian wells and 2,072 barrio springs serve the needs of an additional 6.5 million people in the rural areas.

The existing water supply facilities are evidently inadequate to meet the requirements of the country's fast-growing populace. More than 1,000 barrios, 800 municipalities and 6 cities remain unbenefited by water supply facilities. Moreover, the existing ones require improvements and rehabilitation to increase their capacities.

2. PROGRAM OBJECTIVES

As a support infrastructure, the four-year water supply program calls for the provision of sanitary water for the populace and the needed water supply for commercial and industrial uses. Major portions of the program are oriented towards the expansion and rehabilitation of existing waterworks systems together with the construction of new waterworks in the more densely populated areas. In areas that cannot be reached by waterworks systems, more springs will be developed and artesian wells dug.

Hand in hand with the development of water supply facilities will go provisions for the adequate collection and disposal of waste water, together with programs of maintenance and repair of such facilities. In more important cities like Manila, this step is of high priority with respect to public health and sanitation.

3. PROGRAM PROJECTS

The four-year program for FY 1972-75 includes the following main project categories: (1) the improvement of the Manila Waterworks System, (2) the expansion of the Manila Sewerage System, (3) the construction and rehabilitation of provincial waterworks, and (4) the construction of artesian wells and springs. All these projects will be undertaken by the National Waterworks and Sewerage Authority (NAWASA). The peso and dollar requirements for these projects during the four-year period total ₱361.30 million and $53.47 million, respectively.

A. The Improvement Program for the Manila and Suburbs Waterworks System

The improvement program for the Manila/Suburbs waterworks system involves two stages: (1) 1st Stage (Interim) Improvement Program and (2) 2nd Stage (Long-Range) Improvement Program, Phase I.

1) 1st Stage (Interim) Improvement Program

NAWASA's Interim Improvement Program for Manila, partially funded with a $20.2 million IBRD loan, started in 1964, and originally scheduled for completion by 1968, is still unfinished as of FY 1971. The remaining 5 per cent of the work is expected to be finished by the early part of FY 1972. The completion of the project will correct the serious inadequacy of the present system. However, its expanded capacity of 395 mgd will satisfy the water needs of the area only up to 1973. Hence, the need to undertake the 2nd Stage Improvement Program becomes imperative.

2) 2nd Stage (Long-Range) Program, Phase I

Water supply requirements of Manila and Suburbs are expected to increase from 300 mgd in 1970 to 830 mgd in 1985. The First Phase of the Long-Range Program is thus envisioned to meet the needs of the area up to 1985. The whole First Phase program is estimated to cost ₱513.43 million, with $36.70 million, as foreign exchange requirement and ₱274.88 million as local counterpart. Actual implementation of the First Phase is scheduled from FY 1973 to FY 1975.

B. The Sewerage Expansion Program for Manila and Suburbs (First Phase)

Supplementing the proposed improvement of the water supply system of Metropolitan Manila is the proposed improvement and expansion program of its sewerage and disposal system. To date, only 46 per cent of Manila's 1.3 million population is provided with a sewerage system without treatment. The situation is much the same in the suburban areas.

Because of inadequate sewerage facilities, raw sewerage is discharged into the Manila Bay. No provision is made for collecting industrial waste, so that companies are forced to locate their plants close to creeks and rivers. All of these result in widespread pollution and the spread of diseases.

The sewerage expansion program therefore seeks to eliminate these problems. The First Phase of the program covers the Central Service Area. This includes the cities of Manila, Pasay, Quezon, and Caloocan and the municipalities of Makati, Navotas and Malabon comprising 5,895 hectares and a present population of 1.8 million. The First Phase of the program, which is programmed for execution from FY 1973-82, is estimated to cost around ₱317.14 million, of which ₱172.00 million is the local currency component and $24.19 million the foreign exchange requirement.

C. Provincial Waterworks

Because of funding constraints, the investment level for provincial waterworks has been reduced under the revised four-year program for FY 1972-75. Consequently, only 368 waterworks system are scheduled for construction and 224 systems for improvement. Around 2.8 million people will benefit from these projects.

D. Artesian Wells and Springs Development

To supplement the provincial waterworks program, some 9,200 artesian wells and barrio springs are scheduled for construction during the Plan period. An additional 190,000 people in the rural areas will be serviced by these facilities.

All these physical projects, together with the investment requirements, are summarized in Table 12.1. In the same table, targets and accomplishments for FY 1970 and FY 1971 are compared.

Table 12.1—REVISED WATER SUPPLY AND SEWERAGE PROGRAM INVESTMENT REQUIREMENTS, FOREIGN LOAN UTILIZATION AND PHYSICAL GOALS FY 1972-75
(In million ₱/$)

INVESTMENT REQUIREMENTS	CURRENCY (IN MILLIONS)	FY 1972	FY 1973	FY 1974	FY 1975	FY 1972-75
Water Supply and Sewerage Program	₱	91.90	61.90	81.50	126.00	361.30
	$	.80	8.60	23.00	21.07	53.47
A. *Foreign Loan Utilization Peso Counterpart*						
1. 1st stage (Interim) Improvement program for Manila/Suburbs	₱	18.00	25.00	—	—	43.00
	$	—	—	—	—	—
2. Manila Long-Range Program, First Phase, $36.70 from IBRD proposed	₱		31.18	58.18	80.00	169.36
	$	—	5.58	18.38	12.74	36.70
3. Metro, Manila Sewerage (proposed)	₱		2.82	19.32	30.00	52.14
	$	—	2.02	3.51	7.22	12.75
4. Manila Metropolitan Metering Project (proposed)	₱	—	0.80	0.80	—	1.60
	$	—	—	—	—	—

PROJECT CATEGORY	PHYSICAL TARGETS FY 1970	PHYSICAL TARGETS FY 1971	PHYSICAL ACCOMPLISHMENTS FY 1970	PHYSICAL ACCOMPLISHMENTS FY 1971	ANNUAL PHYSICAL TARGETS FY 1972	FY 1973	FY 1974	FY 1975
a. Manila Interim, %	5	8	5	3.3	—	—	—	—
b. Long Range Improvement, % ..	—	—	—	—	20	25	25	30
c. Sewerage Expansion, %	—	—	—	—	5	10	10	15
d. Prov'l Waterworks, Construction, No.	15	36	55	11	75	107	57	71
Improvements, No.	—	7	19	—	44	52	57	71
e. Artesian Wells/Springs, No. ...	940	476	36	43	6,700	779	826	900

CHAPTER 13
Tourism

Tourism as an Industry

Tourism is an important industry that has a large and potentially critical impact on the economy. One study of the future of tourism in the Pacific and the Far East estimated that each $1,000 of tourist expenditure would increase a country's income by $3,200 and that every $1,000 spent by a tourist in the country would generate $540 for wages and $320 for taxes. Although these figures may be somewhat exaggerated, still it is correct that tourism generates income, employment and taxes.

The multiple expansion in income is largely because of the benefits from tourism accruing not only to the service industry but also to the other sectors of the economy, particularly to those industries that depend on the tourist trade. The social overhead capital provided for the tourist industry must certainly have beneficial effects for the rest of the society. Thus, proceeds from tourism, aside from paying off a considerable share in investment facilities, generate employment and taxes and improve the earnings and living conditions of local residents.

Furthermore, as an export industry, tourism can contribute a substantial amount of the foreign exchange necessary for development, especially in periods when temporary setbacks in the dollar earnings of traditional exports occur. Aside from these economic benefits, it may also be possible to generate greater international awareness of the country by virtue of the visit of tourists, from a public relation's point of view. Moreover, since international tourism is the promotion of what is unique in a given country, it contributes to the preservation of Filipino culture and traditions.

1. THE PHILIPPINE TOURIST INDUSTRY

When measured in terms of foreign visitor and tourist expenditures, the industry has grown consistently during the last decade. Tourist traffic increased from 50,657 visitor arrivals in 1960 to 144,071 in 1970, equivalent to a growth rate of 11.2 per cent annually. The industry assumed negative growth rates in 1962, 1964, 1967, and 1968, but recovered gradually in the succeeding years. Excepting 1962, tourism receipts, which was estimated at $2.9 million in 1960, increased steadily to a high level of $97.8 million in 1970. The tourist industry was the fourth top dollar earner in 1970, the total dollar receipts from the industry exceeding the value of total export shipments of coconut oil. The total receipts in that year constituted about 9 per cent of the total export proceeds and 36.8 per cent of the total invisible receipts in 1970.

Yet, the potentials of tourism have not been exploited fully. The report previously referred to made a forecast of the growth of tourism for the year 1968 for six Asian countries including the Philippines. Using the number of tourists that visited these countries in 1958 as base, projections were made for 1968. The table below compares the forecasts with actual performance in 1968.

Number of Tourists
(Thousand)

	ACTUAL 1958	FORECAST 1968	ACTUAL 1968	ACTUAL OVER FORECAST PER CENT
Hong Kong	103	490	675	138
Japan	97	520	500	96
Thailand	50	230	375	163
Singapore	75	150	273	182
Taiwan	26	200	302	151
Philippines	30	310	113	36

Except for Japan and the Philippines, all the countries included in the study exceeded the forecasts by wide margins. Hong Kong surpassed the forecast by 38 per cent, Thailand by 63 per cent, Singapore by 82 per cent, and Taiwan by 51 per cent. Japan was close to the projected target, but the Philippines was about two-thirds short of the forecast.

Taking account of the period 1968-70, Japan expanded its tourist volume by 55 per cent, Singapore by 100 per cent, Thailand by 60 per cent, Taiwan by 50 per cent, and Hong Kong by 33 per cent. The increase in the tourist volume in the Philippines for the same period was only 27 per cent. In 1970 alone, the number of tourists that visited Hong Kong was almost 7 times that of the Philippines. It is estimated that only one out of every twenty tourists who visited Hong

Kong during the year came to the Philippines.

Certain factors which are expected to stimulate the growth of world travel make it more urgent to exploit the full potentials of the tourism industry. Some of these factors are the following: 1) the opening of new areas in the Pacific to tourists from the United States and Europe, the Philippines being included geographically within such areas; (2) the fast-changing pattern of air travel especially after the introduction of the jumbo jets and the SST's; (3) the increasing travel by nationals of Asian countries; and (4) the increasing awareness among potential tourists of the worth of the Philippines as a tourist attraction. It is estimated that the Pacific Area will have an overall growth rate of the tourist market in the area of 10-17 per cent annually up to 1980.

2. PROBLEMS OF THE TOURIST INDUSTRY

The relatively poor performance of the tourism sector in the 1960's can be attributed to many factors, some stemming from policies affecting this particular sector. These policies may concern airline frequencies and routes, foreign exchange rate and infrastructure for tourism-specific type of investments.

On the issue of exchange rate policy, the Philippines had a very good exchange rate from the viewpoint of tourists' currencies after the 1962 devaluation and decontrol. The performance of the tourist sector in the 1960's, however, implies that the question of exchange rate was probably not too important at the time.

The question of airline routes and frequencies is something that presents itself as a very important policy question. The disadvantage of the Philippines in terms of flight frequencies can be seen readily from the following table of Pacific Airline frequencies for 1970.

WEEKLY AIRLINE FREQUENCIES
TO AND FROM
SELECTED ASIAN COUNTRIES

TO	FROM	DIRECT	INDIRECT	TOTAL
Manila	Japan	15	8	23
	Hong Kong	23	—	23
	Sydney	11	2	13
	North America	11	—	11
Singapore	Hong Kong	11	42	53
	Sydney	2	25	27
Bangkok	Hong Kong	85	48	133
Hong Kong	Japan	45	136	181
Japan	North America	57	—	57 [a]
Australia	North America	45 [b]	—	45

[a] 37 are Jumbo jet flights.
[b] With one or two stopovers.

Presently, many routes are access routes to Manila, but there are few through connections stopping over Manila and leading to other places from the original take-off point. For example, there is a substantial number of flights between Manila and Hong Kong, but these are mainly shuttle routes.

The existing setup can partially be explained by the country's policy on the entry of aircarriers. The tendency over many years was one of protecting the national carrier and this has resulted, to some extent, in the restriction of flights into the country. The promulgation of the open skies policy, however, is helping considerably in expanding air routes and frequencies. Also in line with this strategy is the inclusion of Manila in tourist packages.

The entry of more international carriers will not mean a reduction of the demand for the services of the national airlines. On the other hand, the demand for traffic leaving and going to Manila may increase due to the expansion in the over-all capacity of airlines. In view of the geographical location of the Philippines, it is accessible only by air or sea, and the bulk of foreign visitors coming to the country are air travellers. In 1970, commercial airlines ferried in 93 per cent of the total 144,071 visitor arrivals, while the rest were brought in by international vessels. The increase in air carrier capacity may not only cause a shift from sea to air travel (both entering and leaving); it may also lead to more visitors coming into the country. This favorable response is demonstrated by the case of Thailand, Hong Kong and South Korea, to cite only some countries.

Another factor which may have also contributed to tourism's relatively slow expansion in the last decade is the supposedly poor image of the country insofar as the tourist is concerned. A survey of travel agents in the United States reveals the following opinions:

> There is a lack of color. It has less than a romantic image.
>
> Manila is not an "in" spot. It's over-populated, and it's not much.
>
> There is a lack of internal transportation. It's difficult to get around.
>
> Current promotion is non-existent . . . We don't know enough about the Philippines . . . We can't get information.
>
> We have problems recommending it.
>
> People don't feel it's worth visiting.

Furthermore, a Filipino ambassador speaking before the recent Conference of Philippine Ambassadors in Madrid, Spain states:

> When Pope Paul VI visited the Philippines last November, coverage of the trip by the German media was the most extensive they had ever undertaken for a single event in our country. There were pre-visit reports meant to acquaint the German public with the Philippines . . .
>
> Almost all of these reports were uniformly pejorative towards our country. The burden of the mass of information fed to the German public was that Philippine society, particularly the government and the ruling oligarchy, was corrupt; that the country was mired in poverty; the people were a violent people, with little respect for human life and property; and whatever was overlooked by this violent population was not spared by a violent environment — by typhoons, earthquakes, tidal waves . . . I feel that this description of the Philippine image in Germany applies as well to most other parts of Europe.
>
> What is the reason — or what are the reasons — for this sustained hostility of the European media towards our country? An obvious explanation is that the European media simply mirror and reflect, understandably enough, the wild, negative and self-disparaging orientation and output of our own Philippine press.

Few in the country would deny that the existence of a free and widely disseminated press is a great national asset. But the pessimism of the press alone does not account for the situation in full because this may also be attributed to the lack of basic and objective information about the Philippines abroad.

The efforts toward counteracting the unfavorable image of the country overseas can lead to more investments in the area of promoting the country as a tourist attraction. To some extent, this is related to the level of investment that is needed or incurred by the people engaged in the tourist industry; and in this regard, greater participation of international carriers on the routes going through to Manila allows more private attention and resources to be devoted towards attracting tourists to come to Manila.

Some other problems of the industry may be briefly summarized as follows: (a) inadequate tourist infrastructure facilities; (b) lack of funds or too dispersed utilization of tourism investment resources for tourist plant development; (c) uncoordinated promotional activities; and (d) overlapping and duplication of functions of bodies in charge of tourism.

3. THE TOURISM INDUSTRY DEVELOPMENT PLAN

The tourism industry development plan is a joint undertaking between the government and the private sector, with the former undertaking the bulk of the infrastructure development projects and the adoption of appropriate policy measures on tourism; the latter assumes the burden of developing tourist plants and of having a greater role in promotional efforts. The government provides the necessary conditions for a faster growth of the industry which include, aside from infrastructure, giving incentives to investments, directing promotions, formulating policy guidelines and adopting the necessary administrative machinery that can well meet new and changing problems of the tourist industry.

The Plan calls for an investment of ₱13.7 billion for infrastructure development during the Plan period, and ₱114 million as loan assistance from government financing institutions for tourist plant development. These resources do not include investment funds representing private interests.

A. Plan Objectives

The tourism program takes cognizance of both the immediate and long-range needs of the industry. The specific objectives of the Plan are:

1. To relieve the balance of payments problem by increasing the receipts from the tourist trade.
2. To provide the necessary infrastructure facilities that will improve the climate for more tourist investment. Such will include physical facilities — roads and highways, bridges, water system, airports, etc. essential to the attainment of the targets of this Plan.
3. To promote the development of tourism plants by giving incentives to private investors and inducements to foreign capital. Incentives will take the form of financial assistance and promotion of economically viable projects.
4. To embark on a more effective promotion and marketing campaign, shifting concentration of new directions like European, Australian and Japanese travel markets; and to sustain adequate flight frequencies of international airlines serving the country.

B. Plan Targets

The total dollar receipts from the tourism industry is expected to increase by 21.0 per cent in 1972 and by 21.8 per cent at the end of the Plan period. Translated

in terms of visitor arrivals, the Plan forecasts arrivals to increase from 185.6 thousand in 1972 to 289.7 thousand in 1975 (Table 13.1). Tourist receipts during the Plan period are projected to increase from $95 million in 1970 to $112.8 million in 1971, $136.5 million in 1972, $165.4 million in 1973, $201.0 million in 1974 and $244.8 million in 1975, expanding at a rate of 20.8 per cent per year during the Plan period. Tourist receipts as a percentage of total invisible receipts was 36.8 per cent in 1970; this is projected to become 56.9 per cent in 1975. The share of tourism receipts in total exports will increase from 8.8 per cent in 1970 to 13.5 per cent in 1975.

Table 13.1—ESTIMATED VOLUME OF VISITOR ARRIVALS AND TOURIST RECEIPTS, 1971-75

YEAR	VISITOR ARRIVALS (NO. IN THOUSANDS)	TOURIST RECEIPTS (MILLION U.S. DOLLARS)	TOURIST RECEIPTS AS % OF TOTAL INVISIBLE RECEIPTS	TOURIST RECEIPTS AS % OF TOTAL EXPORTS
1970*	144.1	95.0	36.8	8.8
1971	162.8	112.8	38.9	9.2
1972	185.6	136.5	42.7	10.0
1973	213.4	165.4	46.6	11.1
1974	247.6	201.0	51.5	12.3
1975	289.7	244.8	56.9	13.5

*Actual

4. TOURISM INFRASTRUCTURE: PRIORITIES OF TOURISM DEVELOPMENT

The priorities of tourism development must be geared essentially toward earning foreign exchange. There is much debate on the question of whether it is well to develop domestic tourism first before foreign. This appears to be much of a complex chicken-or-egg type determination of priorities. What is necessary is to lay out the major investments that are tied towards wining foreign exchange from tourism.

In the first place, the increased inflow of foreign tourists into the country can lead to more local residents going out and seeing their own country. Moreover, the issue of Filipinos touring their own country first before others is related to the question of a correct foreign exchange policy. With the adoption of a floating exchange rate, the cost of travel, in addition to other measures that seek to restrict foreign travel, can lead to a shift to domestic travel, at least in part (although the demand for foreign travel by Filipinos might be inelastic).

In view of these factors, the concentration of investments or the complementation of investments in road transport, in air transport, as well as in other tourism infrastructure, must be geared towards initially attracting tourists to come to Manila and subsequently providing the needed facilities there. The average tourist would normally not spend more than a week in a country, especially when he has other countries in his itinerary. Moreover, tourist packages are largely arranged such that, within the tourism schedule, a number of days are allotted to Manila and environs and very little else is allotted towards travel within the Philippines. Only those who stay much longer really travel within. In the latter case, the foreign exchange forthcoming is relatively small, not only because very few foreigners remain in the country for long periods of time but also because most of those who do stay longer learn to economize and may be beneficiaries of Filipino hospitality.

In 1970, about 63 per cent of the tourists stayed at an average of not more than four days with a good majority of these only for two. About 21 per cent stayed for 5-17 days while 9.7 stayed from 18-59 days and only around 6.3 per cent for more than 59 days. It is readily evident that the 2-4 day tourists are the primary source of foreign exchange receipts from tourism; hence, tourism development must give priority to servicing the needs of this visitor group, and this can be done through an improvement of tourist facilities in the Manila area, including those in the neighboring provinces.

Also to be noted is the development of sunlust tourism space in the Philippines related to the Manila area. Sunlust travel, as differentiated from wanderlust travel, is dependent upon the existence in one place of different or better amenities than are available in a specific locality. The principal purpose of wanderlust, on the other hand, is to see and visit foreign or unique places and cultures. The increase in the demand for sunlust facilities in the Manila area lends further support for the strengthening of the tourism infrastructure within the metropolitan Manila area.

Some efforts at putting investments like the Nayong Pilipino in the vicinity of the International Airport, the proposed Intramuros Project partly financed from the $10 million loan from Spain for tourist development, and the initiation of the tourist transit program are already a concession towards this major need. It is difficult to plan the development of distant tourist spots without initially developing and improving those in the general Manila area.

5. INFRASTRUCTURE PROJECTS LIST

The projects of the highest priority are those situated

in the general Manila area including Cavite, Batangas, Laguna, Bataan, and Corregidor. Most notable among these tourist projects is the improvement of facilities in the Manila tourist belt, Tagaytay Ridge, Pagsanjan Falls, and Corregidor Islands. The infrastructure necessary for the development of these tourist spots include connecting and access roads, most of which are already existing but require improvements. Funds have been released for some stages of work started since 1970. Of equal importance is the improvement of road facilities leading to beaches and coves in the Manila Bay area in Batangas, the route of the "Death March", and some areas around and overlooking the Laguna de Bay including the Caliraya Lake and Reservoir.

A complete listing of all infrastructure requirements for major tourist areas in the Philippines is contained in Appendix A. Some of these are part of the infrastructure for roads for FY 1972-75. Not in the list but considered a sine qua non to the expansion of the tourist industry is the Philippine-Japan Friendship Highway and other highways projects designed primarily for other economic reasons, like the improvement of transportation and communication. The completion of these projects will certainly provide a tremendous boost to Philippine tourism.

6. TOURIST PLANTS

The provision of adequate tourism plants in terms of modern accommodations and suitable recreational facilities is a major aspect of tourism development.

In Greater Manila, there are presently 2,966 rooms in 17 first-class and recommended hotels after almost a doubling of capacity by the construction of luxury hotels during the last 3 years. Nine other first-class hotels are under construction which will add another 2,225 rooms upon completion in 1972, making the available total 5,191 rooms (Table 13.2).

About 70 per cent of all foreign tourists stay in hotels while in Manila. A forecast of hotel occupancy on the basis of projected visitor arrivals reflects that there will be a surplus of 329 rooms in 1971, 781 rooms in 1972 and 29 rooms in 1973. However, it is expected that there will be a shortage of 851 rooms in 1974 and 1,881 rooms in 1975. The hotels under construction in the Greater Manila area are expected to meet the projected shortage within the next five years.

Outside of Greater Manila, investments on the construction and improvement of hotels in priority areas were completed in Tagaytay and Pagsanjan and were started in Corregidor last year. The Taal Vista Lodge in Tagaytay was sold to the private sector while the site of the Corregidor Hotel Complex was subleased to a private firm. The Pagsanjan Rapids Hotel was a private venture partly financed by the DBP.

Direct investments of the government in tourist plant development are exercised through the BTTI. One notable project purely supported by public funds is the Banaue Hotel and Youth Hostel in Mountain Province. Counterpart funds to provincial, city and municipal governments were also set aside by the BTTI which had co-financed the following tourist plants during the last 2 years: Lingayen Beach Rest House, Igorot Village in Baguio City, Salinas Salt Mines in Nueva Vizcaya, Derham Park in Pasay City, Bagasbac Beach House in Camarines Norte, Banahaw Resort in Quezon, BTTI Museum in Iloilo City, Capitol Park Development in Surigao del Norte, Callao Resthouse in Cagayan and T. M. Kalaw St. in Manila as part of the Tourist Belt.

Table 13.2—NUMBER OF ROOMS OF RECOMMENDED HOTELS IN GREATER MANILA

EXISTING HOTELS	NO. OF ROOMS
Manila Hilton	430
Manila Inter-Continental	420
Savoy Philippines	265
Filipinas Hotel	330
Manila Hotel	265
Bayview Hotel	300
Tower Hotel	122
Mabuhay Hotel	104
Sulo Hotel	60
Hotel Timberland	118
House International	116
Shellborne Arms Hotel	125
Aloha Hotel	84
El Dorado Hotel	85
Empire Hotel	62
Luneta Hotel	60
Swiss Inn	20
Total	2,966

HOTELS UNDER CONSTRUCTION	NO. OF ROOMS	DUE DATE OF COMPLETION
Diplomat Hotel	236	1971
Hotel Aurelio	173	1971
Hotel Royale	240	1971
Ambassador	250	1971
Enrico Hotel	231	1971
Manila International Hotel	450	1972
Hotel Riviera	360	1972
Hotel Hasmin	125	1972
Holiday Inn	160	1972
Total	2,225	
Grand Total in 1972	5,191	

Not a hotel but considered a major accomplishment in attracting foreign visitors is the Philippine Village (Nayong Pilipino), which was also completed last year.

7. INVESTMENT INCENTIVES

There are many areas wherein the government can fully assist the tourism industry. The services created by tourism have the characteristics of export products in the light of foreign exchange earned for the country; hence, the numerous incentives to preferred and pioneering industries as listed by and registered with the Board of Investments may be availed of by existing and potential investors.

Separate incentives may further be afforded the industry through legislation or by various instrumentalities of the government. Within the period of this Plan, the government will aspire to work for such necessary incentives that can attract greater investments from the private sector. Certain areas to be explored are: (a) standard incentives in the form of repatriation of investments, remittance of earnings, capital gains tax exemptions, tax allowance for investments, etc.; (b) special incentives to new tourism plants; (c) employment of foreign professionals and technicians.

Of timely and prime significance as a government incentive afforded to needy investors is the preference in the acquisition of government loans. Government financial institutions that are engaged in financing or investment operations will accord high priority to applications for financial assistance in the construction of tourist plants and tourist facilities.

8. ADMINISTRATIVE REFORMS

The need for major reforms in the government machinery regulating the tourist trade is dictated by new demands brought about by recent developments in the industry. To meet new requirements and fast changing situations, there must be a single body like the Philippine Tourism Commission aimed at centralizing all allied functions of tourism development. In this manner, the conflicting areas of responsibilities between the BTTI and the PTTA will be eliminated and greater coordination will be possible. It shall exercise not only regulatory but also planning functions as well, like the preparation of detailed investment plans priorities. To be more responsive to the problems and needs of tourism as a private industry, the said Commission will have leadership partly drawn from the private sector.

The Commission on Reorganization recommended the creation of this Commission and it is expected that this will materialize during the Plan period.

9. PROMOTIONS AND MARKETING

Tourism promotion is a difficult and expensive educational process but it is imperative that the government is awakened to the fact that regardless of costs, countries all over the world find promotions the most effective way to compete for the tourist dollar. The future prospects of world tourism and its keen competitiveness especially demands more massive promotions.

The Philippine Tourist and Travel Association is the government's instrumentality instituted to undertake both overseas and domestic tourist promotions. Continuing efforts along this line by the PTTA and/or other bodies are highly recommended within the Plan period, particularly the programs of a) inviting travel executives to the country in cooperation with the Philippine Airlines; b) mobilizing the overseas branch offices in San Francisco, New York and Tokyo to intensify their task of promotions; c) utilizing the country's diplomatic corps abroad more extensively to complement present marketing campaigns; d) supporting the promotions program of the PATA; e) participation in trade and travel fairs; and f) distribution of selected brochures, audio-visuals, posters and other advertising literature in principal cities of tourist markets.

Of notable importance to our present promotions drive is the redirection and doubling of efforts in Japan, Australia and Europe. Concentration of promotions has always been directed to the United States, which is the largest market of the Atlantic and Pacific countries. Presently, there exists the necessity to augment the country's tourist traffic by tapping the Japanese, Australian, and European markets. To achieve success in attracting more tourists from these ends, it is essential to open foreign promotions offices in Sydney, Australia and in Europe while maintaining the office in Tokyo.

Supplementary efforts to the existing promotional activities are: a) the continuance of the Open Door Program of establishing nationwide hospitality projects in major cities of the country; b) securing the continued cooperation of the mass media, particularly the newspaper publishers; c) the creation of the Convention Bureau by the Philippine Chamber of Tourism, intended to promote Manila as a Convention City; d) completion of the tourist belt of Manila which is expected to generate a good amount of favorable publicity and goodwill; and e) securing the continued cooperation of the private sector in extending the needed assistance in promoting the Philippines as a tourist destination. The private agencies actively involved in this under-

taking are the Philippine Chamber of Tourism, the Hotels and Restaurants Association of the Philippines, the Associated Hotels of the Philippines, the Association of Tour Operators of the Philippines, the Skal Club and the Philippine Airlines.

10. PROJECTS AND ACTIVITIES

The projects and activities which are intended to contribute to the rapid expansion of the tourism industry are listed below:

A. **Priority Areas:** Concentration of tourist plant development in the Manila, Corregidor, Tagaytay and Pagsanjan areas on a priority basis. Such development includes the following priority projects: a) extension of the Manila Tourist Belt; b) providing fast access to and from Corregidor on regularly scheduled trips, either by hydrofoil or by any other fast air and sea ferry service; c) building of first-class roads leading to Tagaytay and Pagsanjan from Manila and the conversion of the 6-kilometer short-cut between Tagaytay and Pagsanjan via Canlubang into a first-class road to make the two leading tourist attractions in the area accessible in a one-day package tour; d) improvement of the Manila International Airport, specifically its clearance area and transit lounge.

B. **Specific Projects List:** The specific projects to be undertaken are listed below:

1. Development of a package tour around Laguna de Bay, emphasizing such diverse attractions as Rizal's house in Calamba, Laguna; the International Rice Research Institute and the U.P. College of Agriculture at Los Baños, Laguna; the underground cemetery at Nagcarlan, Laguna; the museum of excavated pottery in Pila, Laguna; Pagsanjan Falls; old churches such as those in Paete, Pakil, Lilio, Majayjay in Laguna and Tanay, and Morong in Rizal; hot springs such as at Pansol and Pakil, Laguna.

2. Museum development program. Although some of the needs in this area will be taken care of by the museum of the Cultural Center, there remain many other specialized museums which will be developed such as an anthropological museum; a military museum depicting the weapons and armaments of our various ethnic groups as well as historical relics and paintings of past battles and military campaigns; a museum of natural history emphasizing Philippine flora and fauna; and a monetary museum. The Central Bank is planning to put up the last of these museums on its new grounds at Fort San Antonio Abad.

3. Preservation or restoration of historical and artistic attractions and sites: for example, making presentable the premises of the underground cemetery in Nagcarlan and repairing the earthquake damage to Sta. Ana church, the only church left with a baroque altar in the City of Manila. In this connection, there is an on-going project to restore the two-story Ayuntamiento building to its original form and to construct a "Pueblo Español", a typical residential-commercial section during the 18th and 19th centuries. The funding for this project will come partly from the $10 million loan from Spain obtained for tourism development and partly from private interests.

C. **Additional Frequencies:** Approval of meritorious applications of international airlines for additional frequencies especially those servicing the U.S. West Coast-Pacific route where 50 per cent of the country's foreign tourists come from. Presently, there are only less than 100 international flights a week to Manila compared with Bangkok. Hong Kong and Tokyo which have flight frequencies ranging from 150 to 600 a week. Expansion of frequencies in Manila can be achieved by favorable policies instead of restrictive ones.

D. **Visa-free Facility:** Fuller publicity to the 7-day visa free facility and a consideration of the extension of the period for pleasure trips from 7 to 14 days and for legitimate business travels up to 30 days. The approval of the 7-day visa-free facility, which is a relaxed entry policy, will be a definite boom to the tourist industry. The feasibility of extending the visa-free facility for even longer periods should be explored.

E. **Charter Flights:** Wider publicity to CAB policy allowing international charter flights on a "back-to-back" basis. The CAB has adopted this new policy but it needs to be disseminated to travel agents and tour wholesalers all over the world.

Appendix A

INFRASTRUCTURE REQUIREMENTS FOR MAJOR TOURIST AREAS OF THE PHILIPPINES SHOWING PRIORITIES

I. MANILA AND BAY AREA

Tagaytay Ridge, Cavite

* 1. Road connection (opening or improvement) between Tagaytay Ridge and Calamba, Laguna through Canlubang. This will avoid monotonous backtracking. For tourists with limited time, a triangle arrangement including Manila, Tagaytay and Pagsanjan may be done with the opening of this road connection without the present backtracking.

2. Road connection between Tagaytay and the lakeshore town of Talisay on Taal Lake. This will make Volcano Island more accessible and will also provide added access to Batangas Province.

* 3. Road connection between Tagaytay and Batangas beach areas such as Matabungkay in Lian, Batangas. These are popular beach areas but their access roads remain bad.

Cavite Beaches

* 1. Road improvement and/or extension to Tanza and Ternate. This will make accessible to Manila better beaches and coves in the Manila Bay area. Improvement, however, must include securing the peace and order conditions of the area.

Los Baños, Laguna

* 1. Improvement and extension of the Mt. Makiling Road to its summit. This will open up an area of rich tropical flora, magnificent vistas, and volcanic attractions such as the "Boiling Mudsprings" above the UP College of Forestry and access to the famous International Rice Research Institute.

Lagura de Bay Circuit

* 1. Improvement of portions of the highway around Laguna de Bay particularly the completion of concrete work between Calamba and Pagsanjan, Laguna, the unpaved section between Pililla, Rizal and Mabitac, Laguna, and the narrow portions between Paete and Siniloan in Laguna.

* 2. Improvement of Caliraya Lake and Reservoir access road from Lumban, Laguna will pave the way for development of this scenic mountain and lake area overlooking Laguna de Bay.

Rizal Province

1. Improvement of the Antipolo to Teresa Zigzag Road and the Cardona to Angono shortcut which by-passes the town of Binangonan. These are short scenic routes from the Greater Manila area to Laguna de Bay via the Morong Peninsula, the closest jump-off points for tours to Talim Island and the Lake's several smaller islands.

2. Improvement of the road to the Montalban Caves.

Bataan Province

* 1. Improvement of the route of the "Death March" from Mariveles, Bataan to San Fernando, Pampanga.

2. Reopening of the coastal route between Mariveles and Morong, Bagac along the South China Sea. This will open up the historic battle areas of Longoskawayan and Quinauan Points where Japanese amphibious forces were annihilated. Excellent white-sand beaches and coves line this side of Bataan Province; these include Saysayin, Paysawan, Til-in, Bagac, and Looc.

3. Improvement of docking facilities in Bataan for cruise boats from Manila. Present piers are at Pulong Bato in Orion and at Limay, Bataan.

Corregidor Island

* 1. Paving of the roads connecting Malinta Tunnel with Topside on the West and Kindley Airfield to the East. These cover the main tour routes on the island.

* 2. Repair of Malinta's main tunnel, the Hospital Tunnel and Gen. MacArthur's Tunnel HQ. Malinta is a major attraction on the island but it needs considerable repair work to make it safe for visitors to tour. Aside from strengthening of the tunnel structure, it needs appropriate lighting facilities.

3. Repair and improvement of docking facilities at North and South Dock of Bottomside.

*** Priorities. The projects of the highest priority are those situated in the general Manila area. See section on *Tourism Infrastructure: Priorities of Tourism Development.***

4. Improvement of Kindley Airfield to provide maximum safety for Air Taxi services to Corregidor.

II. NORTHERN LUZON AREA

Baguio City

1. A continuing problem is the main access road from Manila, the Kennon Zigzag Road, which has been badly damaged at certain sections and is consistently subjected to landsides and washouts during the rainy season.

2. Improvement of the Baguio-Ambuklao Road to encourage more visits to this huge manmade lake.

3. Improvement (widening and paving) of the Baguio-Mount Sto. Tomas road and rehabilitation of the former government resthouse at peak of Sto. Tomas. From this 7,000 ft. high peak, magnificent views of Baguio City and the South China Sea Coast may be seen.

4. Improvement of the Baguio-Asin Road. This will encourage improvement of the Asin Hotsprings and the Ifugao Woodcarver's Village along the road.

5. Stepped up work on the paving of the Halsema Mountain Highway between Baguio and Bontoc, Mountain Province.

Bessang & Tirad Pass

1. Improvement of Tagudin, I.S.-Talubin, Mt. Province Road. Historic battlefields of past wars and an alternate route to Bontoc and Banaue.

Ilocos Norte

1. Improvement of Laoag City-Aparri, Cagayan Road. This coastal road is one of the most scenic routes of Northern Luzon and an important access road to and from the Cagayan Valley.

Pangasinan

1. Improvement of Lingayen-Lucap, Alaminos Road to complete unpaved sections.

2. Improvement of the Bugallon, Pangasinan-Tarlac, Tarlac Road via Camiling, Tarlac as a shorter route to the islands from Manila.

Zambales

1. Improvement of Pangasinan-Zambales coastal road from Alaminos Pangasinan to Olongapo will enhance the scenic beach areas along the South China Sea coast of Zambales and add an alternate route to the Hundred Islands.

III. SOUTHERN LUZON

Manila South Road

1. Completion of paving of roads and of bridges between Quezon Province and Bicol Provinces particularly of the section between Pagbilao, Quezon and Camarines Norte/Quezon boundary. The Quezon National Forest Park and the beaches at Atimonan are accessible along this route.

Camarines Sur and Albay Provinces

1. Improvement of coastal road along Lagonoy Gulf from Tiwi, Albay to Sagnay, Camarines Sur and its inland connection to Pili Airport, Camarines Sur. This is a scenic route overlooking the Pacific and the fine beaches and islands of the Lagonoy Gulf. This will add an alternate sightseeing route through these two popular Bicol Provinces.

2. Improvement of Legaspi City Airport. According to studies made by the Bicol Development Planning Board the present airport's location is not the best.

Sorsogon Provinces

1. Improvement of the Legaspi City-Matnog, Sorsogon road. This is included in the Friendship Highway's development.

2. Improvement of the Sorsogon Airport.

3. Improvement of the Bulusan Lake access road.

IV. VISAYAN PROVINCES

Cebu

* 1. Completion of the Lapu-Lapu City-Cebu City Bridge.

Panay Island

1. General improvement of existing main roads, particularly the main tour route from Iloilo City to San Joaquin.

Negros

1. General improvement of existing main roads north and south of Dumaguete City.

2. Construction of access road to Lake Balinsasayao in Negros Oriental.

Bohol

1. General improvement of existing main coastal roads, particularly those in south and southwestern Bohol and the Tabilaran to Carmen and Sierra Bullones

road. These routes include the major historical and scenic areas of Bohol.

Samar and Leyte Islands

1. Improvemennts as envisionned in the projected Friendship Highway including the San Juanico Strait Bridge and ferry connection to Luzon and Mindanao will make travel easier through these islands and enhance the development of tourism in these historically rich and scenic areas.

Palawan Island

1. Improvement of the Puerto Princesa to Bahile Road as the main route to the "Underground River".
2. Improvement of the Puerto Princesa to Quezon Road as the main route to the Tabon Caves.
3. Construetion of airstrips in Taytay and El Nido to allow air taxi services to these scenic areas of Northern Palawan which otherwise are accessible only by boat.
4. Improvement of access road between Bato on Malampaya Sound and Taytay on Taytay Bay. This is a 9-kilometer road across the island's northern section connecting the rich fishing grounds of Malampaya Sound on the west with Taytay on the east where the historic remains of an old Spanish fort may be found.

V. MINDANAO AND SULU

Improvements envisioned by the completion of the Friendship Highway will stimulate greater travel and tourism in this area.

Cagayan de Oro-Iligan City-Marawi City Route

Improvement of this road network connecting these three important cities will enhance the tourism potentials of this area, which is a perfect combination of scenic, historical, cultural and industrial attractions. As the airport at Iligan City occasionally closes because of weather conditions, the improved overland route as suggested will enable tours bound for Marawi City to land in Cagayan de Oro and continue overland to Marawi via Iligan.

Zamboanga del Norte Province

1. Improvement of the road from Dipolog to Dapitan where the Rizal Shrine is located.

Zamboanga City

1. Improvement of existing major roads to San Ramon and Taluksangay, the main tour routes.

Basilan City

1. Improvement of the road from Isabela to Lamitan District where the colorful Yakan tribe, a major attraction, as well as vast agricultural estates, is situated.

Camiguin Island

1. Improvement of the Mambajao Airport.
2. Improvement of the coastal road around the island not only to make accessible scenic areas and excellent beaches but also to provide safe evacuation routes on this volcanic island where Mt. Hibok-Hibok remains active.

Sulu Archipelago

Because of its numerous small islands, access between islands particularly for tourists is most convenient by commercial flights or via air taxi services.

Improvement of the Sanga-Sanga Airport in Tawi-Tawi as well as of various airstrips established by the Oblate Missionary Order such as those in Siasi, Tandubas and Sibutu Islands.

Improvement of the Cagayan de Sulu airstrip, and construction of a suitable airstrip in the Turtle Islands.

General improvement of roads in Jolo and Tawi-Tawi Islands.

PART IV

Human Resource Development

Human Vaccine Institute
EVELLA

CHAPTER 14
Education and Manpower

The major challenge in Philippine education is how to direct the strong social demand for education to the areas that could fill in the manpower requirement of industry while at the same time meeting the constitutional commitment to universal literacy. There is a great need for a planning machinery to allocate the large budget for education to levels of education and areas of specialization that would maximize the increase in economic productivity of individuals. Resources have been directed to college education especially in Business and Education programs, and to elementary education. Vocational training has been a mostly neglected area. There is likewise a need for policy decisions and planning mechanisms to optimize the development impact of the large non-governmental investment of resources in the private sector of higher education. The policy decisions should establish the basis for modest allocations of public funds in support of private sector programs where the output directly contributes to manpower development in key fields and to improvement of educational quality.

The constitutional commitment to universal literacy under the pressure of a rapidly growing population has necessitated the absorption of a very large portion of the national budget for education at the elementary level. Secondary and collegiate education has been left mainly to private institutions, as shown by the following figures:

Per cent Distribution of Enrollment between Public and Private Schools, 1968-69

	PUBLIC	PRIVATE	TOTAL
Elementary	94.9	05.1	100.0
High School	32.9	67.1	100.0
Collegiate	06.6	93.4	100.0

It can be seen that responsibility for the three levels of education is divided — the national government for elementary education, the provincial government and private sector for secondary level, and private schools for the collegiate level. The Bureau of Private Schools authorizes the establishment of private schools and supervises their operation. Supervision involves the enforcement of minimum standards with regard to the student/library book ratio, the teaching load of instructors, the inclusion of required courses, etc. Enforcement of these regulations requires inspection which is impossible to accomplish satisfactorily given the present size of the Bureau and the geography of the country.

1. ENROLLMENT RATE OF SCHOOL-AGE POPULATION

The rapidly growing demand for education at all levels has been experienced without any direction from a planning body. Private institutions responded to this demand almost freely since the standards they had to meet were low and based on a concept of profit-orientation.

In the meantime, the absorption of the demand for higher education in private institutions has relieved the state of the great pressure to provide education in the state-supported institutions. The relative freedom of private institutions to provide secondary and especially collegiate education explains partly the high number of schooled persons in the population in the Philippines relative to the corresponding number in other countries, including the most advanced ones.

The ratios of enrollment to population of corresponding age groups at each level are only next to those of the United States and Canada. These ratios are:

	ELEMENTARY AS % OF 7-12 YEARS OLD	SECONDARY AS % OF 13-16 YEARS OLD	COLLEGIATE AS % OF 17-20 YEARS OLD
1960-61	91.6	26.6	13.1
1961-62	93.9	27.6	14.3
1962-63	99.3	30.5	16.3
1963-64	104.2	33.8	16.3
1964-65	108.6	35.4	17.5

This unplanned growth in education output resulted in a surfeit of those with college education especially in fields that are relatively less costly or easy to provide. These are the fields that do not require expensive equipment like Education, Liberal Arts, Commerce, and Law. Over-production here is measured by the rate of unemployment of the school leavers. These data are given in Table 14.1. In the field of Education, for instance, the lack of planning also resulted in the neglect

of the less accepted or known areas of education such as vocational education.

It is felt that the rapid growth in enrollment had resulted in a decline in the quality of education. Two reasons are offered. One is that the production of teachers for elementary, high school and collegiate levels could not have increased so fast given the initial size of graduate faculty who had to train these teachers. Graduate education abroad took place but at a slow rate. The domestic production of master and doctorate degrees in 1960 and in 1967-68 amounted to only 149 and 500, respectively. About 90 per cent of the 1967-68 graduates majored in non-scientific non-technical fields.

The second reason offered is the budget constraint facing schools. The government allocation for education has not kept up with the growth in enrollment. In general private schools are dependent wholly on tuition and other fees for their operation. The level and distribution of income in the Philippines would not permit a large production of quality and scientific-technical education which is relatively expensive.

The problems of Philippine education may be summarized as follows:

1. There is a need for the reorganization of the administrative machinery governing educational activities which would effectively plan and coordinate the administration of both private and public schools and of elementary, high school, and post-high school education. The Department of Education is highly centralized where purely local decisions have to be approved by the Secretary. The existing policy-making body, the Board of National Education, together with the Division of Planning of the Department, has been ineffective due mainly to their poor organizational set-up and stringent financial constraint. Though private schools have assumed the major responsibility in providing secondary and higher education, they have been allowed to operate quite freely. At the same time, there was a failure to recognize their needs for assistance so that they may raise the quality of their output and gear it to manpower requirement.

2. There is a need to evaluate rational and alternative ways of providing universal elementary education, in the light of the large percentage of elementary pupils dropping out before reaching literacy levels and of the large portion of the budget absorbed by this level of education.

3. There is an over-production of high school and college graduates with vocational or professional training that does not correspond to manpower demand. Related to this problem is the substantial "brain-drain" experienced in recent years as shown in Appendix A. In 1968-69, the "brain-drain" amounted to approximately 15 per cent of new college graduates.

4. The problem of quality of education at all levels.

2. THE PRESIDENTIAL COMMISSION TO SURVEY PHILIPPINE EDUCATION

The Presidential Commission to Survey Philippine Education (referred to here as the Education Commission) was created by Executive Order No. 202 on December 24, 1969 to investigate various aspects of the educational system and to make the necessary recommendations for reforms. As indicated in its broad objectives which are given in Appendix B, the Education Commission study is focused on the evaluation of the efficiency of operation of the system and its performance in manpower development.

In answer to the more serious problems which were discussed above, the Education Commission submitted to the President a comprehensive program of reform which includes a reorganization of administration, new sources and allocation of funds, development-oriented curricula for all levels of education, and a more effective planning machinery which would help raise the quality of education, and coordinate manpower development through education and the manpower requirement of industry. The set of recommendations forms an important part of the Education Commission Report which was submitted to the President early in 1971. These recommendations, which are now adopted as part of the Four-Year Development Plan, FY 1972-75, are very comprehensive in their scope, though emphasis is placed on the four problem areas discussed above. Some of them can be implemented immediately, some within a period of 10 years. The reorientation of curricula in high school and in college requires the development of new education programs and the establishment of facilities. These are long-run programs.

The Education Commission recommended projects with which to implement its policy recommendations. The Education Task Force was created by Executive Order No. 318, s. 1971, shortly after the Education Commission Report was submitted to the President. The Education Task Force is to conduct feasibility and development studies on projects contained in the Report. World Bank Assistance is being sought for some of these projects. They are specified in the following sections. In these sections the key policy recommendations and the corresponding projects are given.

A. Some of the Recommendations of the Education Commission

1) Reorganization of Administration

The aim of the proposed reorganization is to achieve greater efficiency by delineating authority over various segments in the educational stratum and at the same time to achieve a coordination in the operations of various units within each segment, and of the various segments with the central administration. Some of the policies recommended by the Education Commission on Reorganization are given below. For the details of the reorganization scheme, please refer to Part V of this Plan.

a) That the Department of Education and Culture be reorganized into:

(1) Office of the Secretary which shall include, among others, the Office of Administrative Services and the Office of Planning and Research,
(2) Bureau of General Education,
(3) Bureau of High Education,
(4) National Library,
(5) National Museum,
(6) Institute of National Language, and
(7) National Historical Institute.

b) That the present policy of recruitment and promotion with the Department of Education and Culture be revised to permit the appointment of administrators and staff specialists with appropriate high level of qualifications and degrees other than BSEEd, BSE, BSAgEd, and similar degrees in the absence of equally qualified personnel within the department.

(c) (1) That a number of the functions and services of the Department be decentralized through the establishment of regional divisions responsible to the Director of the Bureau of General Education for the implementation of the national education policy.

(2) That the heads of regional divisions have operational authority to develop local educational programs within the national framework.

(d) Educational institutions shall be grouped into coordinative units or associations: 1) the State Colleges and Universities Board; 2) the National Polytechnique System; 3) the National Teacher Training System; and 4) the Federation of Accredited Association of Private Schools. These four units shall be represented in the National Board of Education, the over-all policy body for education. The Planning and Research Division shall submit the Education Plan to the National Board of Education.

With respect to the administration of education, a management study of the Department of Education is to be undertaken by the Education Task Force. The World Bank has shown interest in assisting this project.

The plan consists of measures for improving internal effectiveness and increasing cooperation of the Department of Education and Cultures with relevant agencies and institutions such as the National Science Development Board, the National Manpower and Youth Council, the Fund for Assistance to Private Education, and private local and international sources of assistance.

2) Manpower Development Orientation of Curricula

An important responsibility of the Planning and Research Division is to achieve a closer correspondence between the mix and number of school leavers and the mix and level of manpower required by industry. Heavy emphasis is placed on vocational training in the coming years. The vocational courses in elementary school and the two-two plan in high school have not been effective in preparing for employment those students who cannot go on to college. The training in post-secondary vocational schools is neither adequate nor of the nature that corresponds to industrial requirements. This problem has made vocational training unattractive to students. However, the aim is to make the educational system as a whole responsive to the requirement of the economy.

Some of the policy recommendations related to manpower development are given below:

a) That in the adoption of long-range educational plans, the National Board of Education provide a more effective balance between the number and quality of entrants into post-secondary institutions and the national demand for high-level manpower.

b) That there be a national admissions policy to govern entrance to institutions of higher education.

c) That high priority be given to the provision of technical and vocational education and retraining programs in order to meet current and projected needs for trained manpower in a developing society.

d) That a national polytechnic system be established with the Philippine College of Arts and Trades (PCAT) as its nucleus institution in the first instance; and with a University of Technological Sciences to be developed as the apex of the system. The system shall have its own governing board.

(e) That a nationwide network of 5-year comprehensive secondary schools be organized. Both academic and vocational/technical programs shall be offered in the fourth and fifth years in these schools.

Priority given to the requirements of vocational/technical education is indicated by the number of projects for which assistance is sought. The World Bank-UNESCO Team has picked up the following projects for study:

a) Manpower Training Centers — this project involves the construction, equipping, and furnishing of ten (10) regional manpower training centers (RMTC) in the seven (7) industrial regions of the country (Northern Luzon, Central Luzan, Bicol, East Visayas, West Visayas, East Mindanao, and West Mindanao).

All regional manpower training centers shall be completely new; however, four (4) shall be built in completely new sites, while the remaining six (6) centers will be built on independent self-contained units within the sites of existing vocational/technical schools. In addition, technical assistance in terms of export services for the initial training of RMTC staff is requested.

The objective of each manpower training center in its area is to considerably increase the pool of semi-skilled and skilled craftsmen and factory operatives, etc.

b) Technical Institutes — this project involves the construction, equipping and furnishing of three technical institutes. International assistance is requested for this project, and the costs of such assistance program are estimated at about $180,000 (6 man-years at $30,000).

The project will allow for structural changes in the organization and in the curricula with the aim of upgrading the technical education provided so far.

c) Regional Agricultural Colleges — the purpose of this project is to provide facilities, equipment and fellowships for the development of three regional agricultural colleges, one in each region in Central Luzon, The Visayas, and Mindanao, in the framework of a higher education consolidation program.

Technical assistance is requested in the form of fellowships abroad for the staffs of these institutions, and the estimated cost is about $230,000 (430 man-months).

3) Recommendations for Improving Quality of Education

The quality of education cannot be divorced from the curricular changes that are envisaged in the other proposals. Some of the principal recommendations that are mainly concerned with improving the quality of education are the following:

a) (1) That private colleges and universities be encouraged to join and form associations for accreditation and matters of common interest.

(2) That a national federation of these associations (Federation of Accrediting Associations) be established. Among its functions will be to moderate standards among associations and to advise the National Board of Higher Education on financing and developmennt policies for higher education and accredited private institutions. The nucleus of such Federation will be the Philippine Accrediting Association of Schools, Colleges and Universities (PASSCU).

b) (1) That a system of grants-in-aid to accredited institutions be established. Requests for grants are to be made with applications through the Federation of Accrediting Associations (FAA).

(2) That institutions that fail to be accredited shall be directly supervised by the Bureau of Higher Education.

c) That the Board of Higher Education try to ensure comparable standards in state and private accredited institutions and to coordinate funds for the development of government and non-government schools and colleges.

d) That a system of scholarships, loans, and other forms of assistance to students be established in order to relate educational opportunities to student need and ability, and to make the educational system more responsive to national manpower requirements.

e) That the National Board of Education adopt a national research policy and provide funds for research directly related to national development goals.

There are existing government organizations — the National Science Development Board and the Fund for Assistance to Private Education — which colleges and universities (in particular, the private ones) can tap for assistance. As is recommended by the Education Commission, assistance to private schools is to be tied to accreditation.

There exist now science-teaching programs. The following projects are recommended for assistance for the purpose of strengthening and expanding these programs.

a) Project on Science Education Center, University of the Philippines (UPSEC). This project-item would provide facilities and additional equipment for UPSEC, the national center for the improvement of science education.

b) Project on Regional Science-Teaching Centers (RSTC). This project would provide facilities and equipment to four proposed regional science teaching centers and equipment only for another. The five proposed centers would extend further the geographic coverage of the national program to improve science teaching now largely confined to the activities conducted by UPSEC and 5 existing centers.

The proposed five new regional centers are all state institutions which started as normal schools for the training of elementary school teachers. Most have initiated secondary school teacher education programs; however, it may be said that these institutions are at present better equipped in terms of both personnel and facilities for elementary school science teacher education than for the secondary level.

3) Financial Resources and Allocation

As stated in the first section, one innocent root cause of some of the problems of Philippine education is the Constitutional provision for free and compulsory education. The large financial requirement and administrative effort necessary to fulfill this provision exhausted public resources at the expense of greater participation in secondary and post-secondary education. The Education Commission proposes a change in the allocation of the national education budget away from elementary to technical secondary and post-secondary levels and, possibly, to collegiate levels, too. The financial responsibility for elementary education is to be ultimately borne by local governments. The major role played by the private sector is expected to continue. Planning for education takes cognizance of both private and public sectors, including the planning of grants-in-aid for instruction and research. The Education Commission recommends the following:

a) That high priority be given to the transferring of primary responsibility for financing public elementary and secondary education from the national to local governments (primary responsibility includes, at least, the financing of teachers' salaries and the provision of building and sites); and that a system of national government assistance in the form of equalization funds be established to supplement the resources of local governments with limited tax potentials.

b) That local governments be encouraged to seek and develop new sources of funds for education purposes.

c) That the national government responsibility for financing post-secondary education be increased. However, the vocational programs in the new government comprehensive high schools shall continue to be financed nationally.

d) That the principle of government aid to program in private education institutions at secondary and tertiary levels be recognized provided that such such programs meet certain defined educational requirements and standards and contribute to the attainment of national development goals. Aid granted to such programs should be separately accounted for by the institutions concerned and not lead to the diminution of the expenditure of funds of the institutions on other programs.

e) That the National Board of Education and the Department of Education and Culture, in coordination with other appropriate government agencies, endeavor to attract new domestic and external assistance to education in the Philippines and formulate guidelines for their utilization.

The Finance Study Group of the Education Commission gave the financial requirement for FY 1972-74 based on projected enrollment given in Table 14.4 and current per pupil cost, and taking into account expected increases in the contribution of local government to the education budget.

3. THE NATIONAL SCIENCE DEVELOPMENT BOARD

The Education Commission failed to recommend a closer participation of the National Science Development Board (NSDB) in the various programs proposed. The objectives of the NSDB, particularly with regard to the promotion of scientific knowledge through education and research, dovetail with the objectives of education. In many countries, the important educational institutions have become research centers also.

Research and instruction are interdependent activities in universities. The products of research — new knowledge and methodology used — are directly or indirectly transmitted to the students. To a large extent the competence of a teacher is improved by his studies and by those of his colleagues. Most often students are hired as research assistants during their course of study. On the other hand the more qualified researchers are found in the universities.

This interdependence is a well-known fact. In fact one of the first tasks the National Science Development Board undertook was a survey of faculty and research activities in universities in the Philippines. Among its findings are:

1. That a very small percentage of the science and mathematics faculty undertake research.

2. That a very small percentage have attended upgrading courses after having been out of college for more than ten years.

3. That the academic training and preparation of the collegiate faculty in science and mathematics is inadequate; graduates of pharmacy teach biology and general science courses, graduates of engineering teach mathematics and physics.

4. There is a high percentage of the collegiate faculty in science and mathematics that are on part-time basis.

The quality of the faculties in Philippine colleges and universities is, in general, poor. A majority are bachelor degree holders only. Of the schools for which the data are available, we have the following distribution:

Distribution of Faculty by Degree
1968-69

	PROVINCES	MANILA AREA	TOTAL	U.P.
BA-BS degree	.736	.540	.598	.474
MA-MS degree	.244	.312	.292	.358
Ph. D. degree	.020	.148	.110	.168

Source: PCSPE, Unpublished Report; U.P. Annual Report, 1968-69; and Department of Education, Annual Reports of Schools, 1968-69, unpublished.

The above facts point to the need for faculty development and for the strong encouragement of research in universities. A research plan based on a good knowledge of the available research facilities in the country must be developed. Criteria for research grants cannot be evolved without knowing what are the feasible activities, given facilities in existing institutions. Criteria that specify counterpart funds or that limit funding to operating expenditures may discourage research in the very areas that are underdeveloped or untouched.

Assisting research activities of universities and other existing institutions, instead of creating new research institutes, is the more economic way of promoting research activities. University facilities can be easily expanded. And as mentioned already there is a ready staff to undertake the work. Moreover, universities have teaching functions that enable results and the facility for research to be translated into second and third generation researchers.

The promotion of research activities in the Philippines is a long-term process. For some areas it will necessarily involve faculty development, in others it will mean assistance to graduate students here and abroad. Again the choice of where to send the student depends on the facilities the country has for graduate studies. A more serious effort toward faculty and research development for specific areas of specialization will involve planning for the faculty and physical facilities for the departments (of a university) or of an independent college.

Several departments of the University of the Philippines can be cited as examples of educational development. The development plans of the School of Economics, the Institute for Asian Studies, and the Asian Institute of Management, include a ten-year (or longer) program of faculty development and a shorter-term program of facilities development. Should plans succeed, a research centner and a high quality graduate school which can undertake the training of graduate students will materialize. In a sense the institutions developed produce academic "import substitutes" because they later on grant graduate degrees which would otherwise be earned abroad.

A most likely by-product of an effective faculty-research development program is the diminution of "brain-drain". Research facilities and a sizeable graduate study center provide the intellectual challenge many foreign-trained returning academicians demand. It is also hoped that the assistance for research activities would provide some additional compensation to the researchers.

Of course, the criteria for supporting research are to be geared to the requirements of economic development. This is one way of attracting good talents to areas which are more in demand from a development standpoint.

4. MANPOWER AND YOUTH COUNCIL

It is to be noted that the main objective of the National Manpower and Youth Council coincides with the objectives of education. (See Appendix B.) Furthermore, the Education Commission recommends projects in manpower training that are very similar to those in the Priority List of the Manpower and Youth Council as shown in Appendix C.

It is recognized that the training programs of the National Manpower and Youth Council are designed to help out-of-school individuals to acquire training in some skills. The Council has implemented its manpower training programs effectively in cooperation with the Bureau of Vocational Education, other government agencies, and various private organizations.

In addition to its own surveys, the Council utilizes labor market information which it obtains from the

Bureau of the Census and Statistics and from the Labor Statistics Service of the Department of Labor.

Currently, the Council undertakes training programs in specific skills. Its capacity for a serious nationwide training of labor is limited; and if this is supplemented with greater financial resources, there will be a much greater economy of scale in a coordinated approach with vocational institutes and schools. The economical place for large-scale training of labor and youth is in technical institutes. Since there is already a plan to improve and expand technical institutes and high schools, the Manpower Council should avail of and support their services rather than provide substitute training programs.

Through its in-plant training program, the Council's cooperative efforts with industry has evoked much enthusiasm and a growing clamor for its assistance to their supervisory, foremanship, trainer, and in-plant training, projects. The ILO expect staff and the Council's own training technicians have introduced modular training and improved techniques in training in private enterprise which are geared towards the upgrading of skills of both supervisory and plant personnel. The ultimate aim of the NMYC in this particular program is to encourage and assist the private sector in setting up its own training programs and to standardize the quality of instruction in such projects.

5. AVAILABILITY OF TEXTBOOKS AND OTHER LIBRARY FACILITIES

Financial constraints faced by educational institutions and by students limit very stringently the availability of textbooks and other reference materials. A cursory visit to even the highly regarded schools shows the inadequacy of libraries in terms of volume and up-to-date literature. The peso price of foreign books which still compose the bulk of the textbooks of college students is beyond the budget of a majority of college students.

A textbook production program intended to solve the severe shortage of textbooks in the elementary and secondary public schools was launched recently. As of the end of December 1969, the aggregate expenditure on this project amounted to about 61 million pesos producing a total of 25.7 million textbooks which were distributed to public schools as follows: 79 per cent, primary; 16 per cent, intermediate; and 5 per cent, secondary schools. This corresponds roughly to 22 per cent of the textbook requirements of public schools. The targets for textbook production and the funding requirements under the program for the next four years are indicated below:

Textbook Production Program
(Million Units)

FISCAL YEAR	NUMBER OF COPIES	COST IN PESOS
1972	6.2	25.0
1973	8.2	27.0
1974	8.7	28.4
1975	9.3	30.4

There are other projects for textbook development, but as a whole those for collegiate use are very small in scale. Among these projects is the Fund for Assistance to Private Education (FAPE) which gives financial assistance in the writing of books; its budget for 1970-71 is ₱10,000. The Science Education Center is also involved in writing teaching materials in science for elementary and high schools. FAPE also has a project for expanding library facilities and has given a grant of about ₱200,000 to private schools in 1970-71.

The reorganized plan of the Department of Education includes a logistics office which will manage the procurement of teaching materials.

The writing of textbooks and reference materials is very much a part of research activities. We can expect that the production of books and research papers will be an important by-product of any project for faculty and research development. However, separate incentives for book writing may be given in addition to projects for faculty and research development. It is emphasized that a serious long-run plan for book development in a country involves the latter projects. This point strengthens the case for more effective planning of research by the NSDB and FAPE as already discussed above.

The reproduction of foreign technical books at lower cost is necessary. In at least one country in the region, the reproduction of books at very low cost was achieved by ignoring the international convention on copyrights. While the Philippines is a member of the international copyright convention, it is necessary to highlight the fact that the cost of foreign technical and reference books, which cannot be replaced immediately domestically, has made the cost of quality education and of research prohibitive. An important question is raised for the government to consider various alternatives to make scholarly books more accessible.

6. DEPARTMENT OF EDUCATION PLAN FOR 1971-74

The on-going plan for the Department of Educa-

tion consists of its regular program to meet the normal requirement of the projected increase in enrollment, and some special programs. The relative importance of these special programs is rather small as shown by the amount of the Department's budget that is allocated to them. However, as given in List A (below), the activities of the Department are very diverse.

These regular and special programs do not relate yet to the recommended reforms of the educational system. It is not yet possible to integrate the proposals of the Education Commission and the plan of the Department of Education until the former will have been officially approved by the National Board of Education. Hence, we have for the regular programs of the Department the projected enrollment and required faculty, building and books (See Tables 14.2, 14.3 and 14.). Tables 14.5 and 14.6 give the summary of the financial requirement and sources of fund for the whole system. The summary of capital expenditure and the summary of estimated additional recurrent costs are shown in Tables 14.7 and 14.8, respectively. The estimated financial requirement of the UNESCO-World Bank project cost is given in Table 14.9.

List A
Special Programs

The Department of Education undertakes the following special programs:

1. Extension and Expansion of Educational Opportunities
2. Manpower Training

(a) The National Accelerated Manpower Training Program in Vocational Schools in Cooperation with the Department of Labor.
(b) The Pampanga National Agricultural School Pilot Project
(c) Philippines-France Electro-Mechanical Pilot Training Project
(d) SEATO Textile Project
(e) Shoe-Making
(f) Weaving Projects
(g) The Apprenticeship Training Program
(h) Bureau of Vocational Education and the National Manpower and Youth Council Project for the Establishment of Training Centers for Out-of-School Youth in Fish Propagation and Home Canning
(i) Extension and Evening Opportunity Classes
(j) The Future Farmers of the Philippines and the Future Agricultural Home-Makers Organization Project
(k) Bayanihan Youth Economy Settlement Pilot Project
(l) BPS Home Industries and Craftsmen Schools
(m) BPS-NACIDA-NMYC Joint Projects
(n) BPS Home Industries Division Technical Assistance Program
(o) BPS-NMYC Joint Manpower Development Program

3. Health and Nutrition
(a) The Philippines' Applied Nutrition Program
(b) Philippines-CARE School Nutrition Program
(c) Targeted Nutrition Program
(d) Hot Lunch Feeding Program
(e) Mobile Deworming, Nutrition and Health Program
(f) Tooth brushing Project

4. Sports Development and Physical Fitness
(a) Interscholastics Meets
(b) Hiking and Walking for Health Program

5. Food Production and Community Development
(a) Cebu-Sudlong Agricultural School Seed Production Project
(b) Prawn (Sugpo) Culture Project
(c) Bureau of Vocational Education-Esso Fishpond Fertilization Project
(d) The Rubber-Reforestation Program of the Zamboanga del Norte Agricultural College
(e) Extension Services

6. Population
(a) BPS Seminars on Population Education

7. Programs in Cooperation with Other Agencies
(a) Tax Education Program
(b) Land Reform Education
(c) Tourism Project

8). National Language and Culture
(a) Printing of Composite Dictionary
(b) Editing of the Filipino Dictionary
(c) Occupational Vocabularies Project
(d) Supplementary Instructional Materials Project
(e) Filipiniana Book Collection Project
(f) Filipiniana Materials Publications Project
(g) National Heritage Project
(h) Archaeological Projects
(i) Projects on the Study of Philippine Flora and Fauna

Table 14.1—PER CENT DISTRIBUTION OF EMPLOYED AND UNEMPLOYED PERSONS BY EDUCATIONAL ATTAINMENT IN 1965

	EMPLOYED [1]			UNEMPLOYED			ENROLLED [2]			UNEXPLAINED		
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
Total Manpower (14-65 yrs.)	62.4	85.0	40.2	4.0	4.4	3.8						
4 or more yrs. college	73.6	79.2	67.8	4.6	5.0	4.2				21.7		27.9
H.S. Grad. and 1-3 yrs. college ..	50.2	67.9	27.7	7.0	7.5	6.4	22.2	19.6	25.4	20.6	4.9	40.4
VI, VII Elem. and 1-3 yrs. H.S. ..	53.8	75.6	33.1	5.0	5.4	4.8	19.1	18.4	19.8	21.9	0.6	42.3
Less than Elementary	70.7	95.5	44.6	2.9	2.8	3.1						
No schooling	66.0	96.1	46.5	1.9	2.4	1.5				30.0	1.4	51.9

[1] The number employed include part-time workers who desire additional work. Their equivalent full-time unemployment rate is about 5%.

[2] Enrollment figure for combined H.S. grad. and 1-3 yrs. college are those enrolled from 1st-4th yr. college. Enrollment figure for combined VI, VII Flementary and 1-3 yrs. H.S. are those enrolled from 1st-yr.4-th yr. H.S.

Source: BCS *Statistical Survey of Households, Labor and Education*, October, 1965

Table 14.2—PROJECTED ENROLLMENT, 1970-71 TO 1974-75
(In thousand)

	1970-71	1971-72	1972-73	1973-74	1974-75
I. ELEMENTARY:					
Grade 1	1,639	1,665	1,682	1,695	1,707
Grade 2	1,410	1,441	1,475	1,502	1,525
Grade 3	1,268	1,334	1,365	1,400	1,427
Grade 4	1 126	1,190	1,257	1,291	1,328
Grade 5	1,011	1,037	1,105	1,176	1,217
Grade 6	886	962	993	1,064	1,139
II. SECONDARY:					
1st Year	712	734	806	840	909
2nd year	583	642	670	744	783
3rd Year	482	551	610	638	710
4th Year	387	462	526	579	604
III. COLLEGIATE:					
1st Year	252	295	346	388	421
2nd Year	205	218	257	304	344
3rd Year	186	198	211	250	296
4th Year	153	179	192	204	242

Source: PCSPE, Report on Education and Manpower Development

Table 14.3—SUMMARY OF NUMBER OF ADDITIONAL OFFICIALS AND BUILDING FACILITIES FOR ELEMENTARY SCHOOL FY 1971-75

	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
A. Academic Classrooms					
1. Quantity to be completed (units)	3,684	3,666	3,666	3,666	3,666
2. Equivalent number of classrooms	11,000	11,000	11,000	11,000	11,000
B. Home Economics Shop and Library Buildings					
1. Quantity to be completed (units)	—	500	700	800	900
2. Equivalent number of classrooms	—	1,500	2,100	2,400	2,700
C. Number of Teachers	11,000	11,000	11,000	11,000	11,000
D. Number of Division Academic & District Supervisors	483	483	483	483	483
E. Number of Principals and Head Teachers	1,700	1,700	1,700	1,700	1,700

Table 14.4—ADDITIONAL TEXTBOOKS AND FINANCIAL REQUIREMENTS: ALL LEVELS, FY 1970-75
(In thousand units)

	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
Primary						
No. of Copies	6,226	3,360	4,943	3,062	5,557	6,000
Total Cost (₱)	10,295	11,010	12,410	10,680	12,770	12,900
Intermediate						
No. of Copies	595	1,930	1,805	2,125	1,785	1,800
Total Cost (₱)	2,710	9,490	8,470	10,580	9,200	9,270
Secondary						
No. of Copies	1,392	1,485	1,531	1,587	1,662	1,750
Total Cost (₱)	7,500	8,000	8,500	9,000	9,500	10,000
All Levels						
No. of Copies	8,213	10,135	8,279	6,774	9,004	9,550
Total Cost (₱)	20,505	28,500	29,380	30,260	31,470	32,170

Table 14.5—PROJECTED FINANCIAL REQUIREMENTS OF THE EDUCATIONAL SYSTEM
FY 1972-75
(In million pesos)

	FY 1972	FY 1973	FY 1974	FY 1975
A. *Elementary Education*				
Faculty Compensation	929.1	1,015.8	1,105.5	1,105.5
Administrative Personnel Compensation	164.5	192.0	222.4	222.4
Operating Costs	58.3	68.4	78.7	78.7
Construction & Equipment	84.0	113.3	126.4	126.4
Books	20.9	21.2	22.1	22.1
TOTAL	1,256.8	1,410.7	1,555.0	1,555.0
B. *Secondary*				
Faculty Compensation	224.1	278.5	310.4	310.4
Administrative Personnel Compensation	37.0	46.0	55.6	55.6
Operating Costs	15.9	19.7	23.4	23.4
Construction & Equipment	37.9	51.9	52.8	52.8
Books	9.6	11.0	12.3	12.3
Student Assistance	11.9	13.3	14.6	14.6
TOTAL	336.4	419.5	469.1	469.1
C. *Vocational Education*				
Faculty Compensation	20.3	24.3	28.5	28.5
Adm. Personnel Compensation	1.4	1.5	1.6	1.6
Operating Costs	11.8	13.8	15.8	15.8
Construction & Equipment	13.8	18.6	20.1	20.1
Books	0.9	1.0	0.8	0.8
Student Assistance	0.7	1.6	2.5	2.5
TOTAL	48.9	60.8	69.3	69.3
D. *Higher Education*				
Faculty Compensation	177.2	213.3	259.4	159.4
Adm. Personnel Compensation	35.4	42.7	51.9	51.9
Operating Costs	122.8	142.0	159.9	159.9
Construction & Equipment	51.8	69.9	89.1	89.1
Books	3.3	4.6	6.2	6.2
Student Assistance	44.5	51.3	59.6	59.6
TOTAL	435.0	523.8	626.1	626.1
E. *Special Projects and Development Programs* [1]	—	61.8	61.8	61.8
F. *Department Overhead* [2]	8.1	8.2	8.4	8.4
GRAND TOTAL	2,085.2	2,484.8	2,789.7	2,789.7

[1] Under the assumption these capital outlays for all projects will start in FY 1973 and end in FY 1975.

[2] For general administration of the school system.

Table 14.6—PROJECTED SOURCES OF FUND OF THE EDUCATIONAL SYSTEM
FY 1972-75
(In million pesos)

	FY 1972	FY 1973	FY 1974	FY 1975
A. Elementary Education				
Student Fees	53.1	60.3	68.7	76.5
Local Governments	124.4	270.1	445.9	462.0
National Government	1,083.3	1,080.3	1,040.0	1,040.4
Gifts and Donations	—	—	—	—
Endowment Fund Income	—	—	—	—
New Debts	—	—	—	—
Miscellaneous	—	—	—	—
TOTAL	1,256.8	1,410.7	1,555.0	1,578.1
B. Secondary Education				
Student Fees	179.2	222.4	268.9	313.7
Local Governments	117.9	157.5	170.2	191.3
National Governments	39.3	39.4	40.0	40.4
Gifts and Donations	—	—	—	—
Endowment Fund Income	—	—	—	—
New Debts	—	—	—	—
Miscellaneous	—	—	—	—
TOTAL	336.4	419.5	469.1	545.4
C. Vocational Education				
Student Fees	11.9	13.2	14.0	16.1
Local Governments	32.9	43.1	50.4	58.7
National Government	4.0	4.5	5.0	5.2
Gifts and Donations	—	—	—	—
Endowment Fund Income	—	—	—	—
New Debts	—	—	—	—
Miscellaneous	—	—	—	—
TOTAL	48.8	60.8	69.4	80.0
D. Higher Education				
Student Fees	267.0	301.8	343.9	343.9
Local Governments	—	—	—	—
National Governments	147.6	189.6	240.6	240.6
Gifts and Donations	1.0	1.1	1.2	1.2
Endowment Fund Income	2.0	2.2	2.4	2.4
New Debts	17.4	29.1	38.0	38.0
Miscellaneous	—	—	—	—
TOTAL	435.0	523.8	626.1	626.1
E. Special Projects				
New Debts	—	61.8	61.8	61.8
F. Departmental Overhead				
National Government	8.1	8.1	8.1	8.1

Table 14.7—SUMMARY OF CAPITAL EXPENDITURE
(In thousand pesos)

PROJECT ITEMS No.*	CONSTRUCTION: TEACHING & COMMUNAL	ANNEXES AND FARM BLDGS.	BOARDING	STAFF HOUSING	SITE DEVELOPMENT	TOTAL CONSTRUCTION	FURNITURE: TEACHING & COMMUNAL	TOTAL FURNITURE	EQUIPMENT: TOTAL EQUIPMENT	PROFESSIONAL SERVICES	TOTAL PHYSICAL FACILITIES	TECHNICAL ASSISTANCE	TOTAL PROJECT COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(10)	(11)	(12)	(13)	(14)	(15)
Sectors *Total All Sectors*													
A. General Education	50,156	1,398	—	—	6,360	57,914	4,099	4,099	14,444	4,633	81,090	3,003	—
B. Technical Education ...	11,656	521	—	—	1,728	13,905	1,021	1,021	24,755	1,112	40,793	6,732	—
C. Agricultural Education	5,117	490	1,125	547	989	8,259	498	498	4,075	495	13,327	1,518	—
Total A + B + C	66,929	2,409	1,125	547	9,068	80,078	5,618	5,618	43,274	6,240	135,210	11,254	146,463
Foreign Exchange Component													
%					35	15	—	40	30	100	45	100	—
₱ Pesos					3,174	10,651	—	2,247	38,947	6,240	60,844	11,253	—
U.S.$					481	1,614	—	340	5,901	945	9,219	1,705	—
Contingencies—10%													14,646
Total Cost of Project in Pesos and U.S.$													₱161,109
													$24,410
Of which foreign exchange in U.S.$													12,014

* Figures for project item No. 9, Boarding, are not available.

Table 14.8—PROJECT ITEMS A, B, C
SUMMARY OF ESTIMATED ADDITIONAL RECURRENT COSTS
(at constant prices, in thousands of 1971 pesos)

SECTORS	TEACHING SALARIES (1)	NON-TEACHING SALARIES (2)	TEXTBOOKS (3)	MATERIALS SUPPLIES AND MINOR EQUIPMENT (4)	TRANSPORTATION AND TRAVEL (5)	MAINTENANCE (6)	TOTAL (1-6)
A. I. Management Study — Department of Education	—	—	—	—	—	—	—
A. II. Experimental and Model High Schools	3,474.6	1,106.9	70.4	1,654.6	44.4	2,152.6*	8,503.5
A. III. Science Education Center, U.P.	64.2	44.7	25.0	32.6	3.0	96.8	266.3
A. IV. Regional Science Teaching Centers	21.0	17.2	—	25.0	—	64.7	127.9
B. I. Manpower Teaching Centers	782.4	410.4	122.0	6,290.0	255.0	812.1	8,671.9
B. II. Technical Institutes	2,182.0	679.0	46.0	1,010.0	70.0	893.4	4,880.4
C. I. Regional Agricultural Colleges	226.1	130.6	133.9	268.0	24.6	480.1	1,263.3
TOTAL	6,750.3	2,388.8	397.3	9,280.2	397.0	4,499.7	23,713.3

* Including ₱99,000 provision for maintenance of equipment of 10 high schools the facilities of which will be up-graded.

Table 14.9—THE PROPOSED PROJECTS BY THE UNESCO-WORLD BANK TEAM
(In thousand P/$)

	CAPITAL, TECHNICAL ASSISTANCE, FELLOWSHIPS	
	PESOS	U.S. $
1. Management of Education (First Priority)	1,188	180
2. Experimental-Model Integrated High Schools (Fourth Priority)	72,600	11,000
3. Science Education Center	2,789	422
4. Regional Science Teaching Centers	7,096	1,096
5. Manpower Training Centers (Second Priority)	24,628	3,732
6. Technical Institutes	22,900	3,470
7. Regional Agricultural Colleges	14,915	2,260
GRAND TOTAL	146,116	22,160

Appendix A

Table 14.1 A—NUMBER OF PREFERENCE VISAS ISSUED TO FILIPINOS, INCLUDING ADJUSTMENTS OF STATUS, SUBJECT TO EASTERN HEMISPHERE LIMITATION AND RATIO OF EACH PREFERENCE TO THE TOTAL NUMBER OF VISAS ISSUED, 1969

PREFERENCE [1]	NUMBER	PER CENT
First	342	1.7
Second	3,959	19.8
Third	11,017 [2]	55.1
Fourth	1,863	9.3
Fifth	2,819	14.1
Sixth	—	—
Seventh	—	—
TOTAL	20,000	100.0

[1] First Preference: Spouses, unmarried sons and daughters of U.S. citizens
Second Preference: Spouses, unmarried sons and daughters of an alien lawfully admitted to the U.S. for permanent residence
Third Preference: Members of the professions and scientists and artists of exceptional ability
Fourth Preference: Married sons and daughters of U.S. citizens
Fifth Preference: Brothers and sisters of U.S. citizens
Sixth Preference: Skilled and unskilled workers in occupations for which labor is in short supply in the U.S.
Seventh Preference: Refugees to whom conditional entry or adjustment of status may be granted

[2] Out of this 11,017, only some 6,225 applied for third preference as professionals, scientists or artists; the rest were spouses and children granted the same preference who may be professionals in their own right.

SOURCE: *Report of the Visa Office*, 1969, Bureau of Security and Consular Affairs, U.S. Department of State, Washington, D.C.

Table 14.2A—DISTRIBUTION OF FILIPINO IMMIGRANTS TO CANADA BY OCCUPATIONAL CATEGORIES, 1967-1970

OCCUPATIONAL CATEGORY	JUNE-DECEMBER 1967 NO.	JUNE-DECEMBER 1967 PER CENT	1968 NO.	1968 PER CENT	1969 NO.	1969 PER CENT	JAN-MARCH 1970 NO.	JAN-MARCH 1970 PER CENT	TOTAL: JE 1967-MAR 1970 NO.	TOTAL: JE 1967-MAR 1970 PER CENT	RANK
PROFESSIONALS	1,253	69.0	1,557	58.2	1,352	45.1	235	43.8	4,397	54.8	
Nurses, Graduate	697	38.4	727	27.2	757	25.2	107	19.9	2,288	28.5	1
Other Professionals	121	6.6	368	13.8	266	8.9	63	11.7	818	10.2	2
Teachers	133	7.3	181	6.8	153	5.1	17	3.2	484	6.0	3
Science Technicians	143	7.9	42	1.6	32	1.7	14	2.6	231	2.9	4
Physicians and Surgeons	49	2.7	79	3.0	44	1.5	13	2.4	185	2.3	5
Professional Engineers	75	4.1	22	0.8	22	0.7	8	1.5	127	1.6	6
Draughtsmen	6	0.3	62	2.3	25	0.8	4	0.7	97	1.2	7
Physical Scientists	14	0.8	43	1.6	16	0.5	—	—	73	0.9	8
Managerial & Entrepreneural	5	0.3	19	0.7	16	0.5	7	1.3	47	0.6	9
Artists, Writers, Musicians	6	0.3	9	0.3	10	0.3	1	0.2	26	0.3	10
Biologists, Agricultural Professionals	4	0.2	5	0.2	10	0.3	1	0.2	20	0.2	11
Religion Professionals	—	—	—	—	1	—	—	—	1	—	12
NON-PROFESSIONALS	564	31.0	1,119	41.8	1,649	54.9	302	56.2	3,634	45.2	
Clerical	127	7.0	414	15.5	492	16.4	137	25.5	1,170	14.6	1
Non-workers or Dependents	170	9.4	390	14.6	481	16.0	96	17.9	1,137	14.2	2
Manufacturing and Mechanical Trades	24	1.3	107	4.0	491	16.4	30	5.6	652	8.1	3
Service & Recreation—Others	188	10.3	156	5.8	83	2.8	11	2.0	437	5.4	4
Commercial and Financial	4	0.2	17	0.6	34	1.1	11	2.0	66	0.8	5
Other Workers	34	1.9	—	—	8	0.3	4	0.7	46	0.6	6
Domestic, Private Service	5	0.3	10	0.4	18	0.6	5	1.0	38	0.5	7
Construction Trades	5	0.3	6	0.2	18	0.6	3	0.6	32	0.4	8
Laborers	—	—	10	0.4	13	0.4	1	0.2	24	0.3	9
Farmers	4	0.2	5	0.2	4	0.1	2	0.4	16	0.2	10
Transport. & Communication	3	0.2	2	0.1	4	0.1	1	0.2	10	0.1	11
Logging and Fishing	—	—	2	0.1	2	0.1	1	0.2	5	0.1	12
Miners	—	—	—	—	1	—	—	—	1	—	13
TOTAL	1,817	100.0	2,676	100.0	3,001	100.0	537	100.0	8,031	100.0	

Source: Canadian Embassy

Appendix B

OBJECTIVES OF PHILIPPINE EDUCATION

Given the stated development goals, the educational system, as a major contributor towards their attainment, should:

a. Provide for a broad general education that will assist each individual, in the peculiar ecology of his own society, to (1) attain his potential as a human being; (2) enhance the range and quality of individual and group participation in the basic functions of society, and (3) acquire the essential educational foundation for his developmennt into a productive and versatile citizen.

b. Train the nation's manpower in the middle-level skills required for national development.

c. Develop the high-level professions that will provide leadership for the nation, advance knowledge through research, and apply new knowledge for improving the quality of human life.

d. Respond effectively to changing needs and conditions of the nation through a system of educational planning and evaluation.

Appendix C

LIST OF PRIORITY PROJECTS OF THE NATIONAL MANPOWER AND YOUTH COUNCIL

Agriculture

1. Multi-Purpose Cooperative Farming Scheme — A cooperative farming scheme based on economic cooperation will be instituted; it will consist of independent agricultural family farm units relocated in a common area. The aim of this project is to train and assist farmers on intensive multiple cropping. Full use will thus be made of the resources of the multi-purpose cooperative with regard to farm inputs. And after the farmers will have harvested their produce, the cooperative will see to the marketing problem and extend other services as may be needed.

The proposed training center will be located at the school reservation of the Camarines Sur National Agricultural School in Pili, Camarines Sur. Two more such centers will be set up if the scheme proves to be a success.

The estimated cost of the project, which is P542,000, will be partly self-sustaining during the first two years.

2. Multi-Cannery Training Program — This is a job-oriented training program for fishermen and their families which will be launched by the NMYC in Hinobaan, Negros Occidental. Development of the basic skills in canning and in the manufacturing of fish meal, skills upgrading on improved fishing methods and handling of catch, and related training in cooperative principles and practice will be handled every year at a cost of P150,000. This project will continue on a self-sustaining basis.

Industry

1. Foreign Trade Zone Authority Manpower Development Project — An export-oriented industrial complex of light, medium and heavy industries is envi-

sioned by law to go up this year in Mariveles, Bataan. This 556 hectare area shall provide job opportunities to an estimated 130,000 persons for the next four years. Skills peculiar to the industries that will be set up will be required. Preliminary studies and dialogue have been conducted with the Foreign Trade Zone Authority for the implementation of training schemes as may be required by the proposed industries. An estimated P1,000,000 is earmarked for the first two years of the program.

2. National Training Program for Boat Building — The country's more than 7,000 islands and vastly untapped fishing grounds underline the need for an organized scheme in improving, modernizing, and developing manpower skills in boat building. It is estimated that employment in coastwise and domestic shipping runs close to 200,000 workers and that fishing accounts for 300,000. The NMYC envisions a program whereby manpower and out-of-school youth could be trained in skills peculiar to boat building, thereby providing a pool of trained personnel for an incipient boat building industry. This project could be self-liquidating with an initial amount programmed at $1.2 million for four years.

3. Maritime Seamanship Training — The purpose of this project is to establish an integrated manpower training program for seamen, such as deckmen, enginemen and stewards to meet the operational needs of the maritime industry.

At present seamen are being recruited regardless of sea experience, educational attainment or other qualifications. The advancement of the shipping industry will depend partly on the formal training for shipboard employment and skill upgrading of those who are on board. A sum of ₱.6 million is estimated for this project over four years.

4. National Cottage Industry Development Training Program — Unlike other lucrative trades, cottage industry does not require technical skills which can be best acquired only from formal education and could be afforded by few. Besides, the Filipino people are fine craftsmen — being innately creative and manually adept. Our country being rich in available resources (such as materials) this industry will flourish with minimum financing.

Due to the foregoing, the need for a full-scale development of the industry has been felt. With the participation of other governmental entities as the NMYC, NACIDA, Department of Labor, Department of Education, Board of Investments, Infrastructure Operations Center and the Department of Social Welfare, the National Cottage Industry Development Program was launched with the main objective of increasing the country's export base in the field of woodcraft, fibercraft, shellcraft and other cottage industry products. Corollary to the aforementioned objective are the training of people for productive employment and the curtailment of social unrest in certain parts of the country.

It is in the training for productive employment where the role of the NMYC fits in. The NYMC likewise will have a hand in the planning phase of the program by way of feasibility studies from the point of view of manpower availability and development for the cottage industries.

5. Foundry and Other Allied Trade Skills Training — During the past years there has been a considerable increase in the number of foundry shops in the Philippines. However, this increase in foundry shops did not bring about a proportional increase in foundry products as evidenced by the supply of such products in the market. This can be traced partly to the fact that people operating such shop do not employ new methods and techniques to facilitate a faster and more efficient production of foundry products. Shops, which are mostly owned by chinese, still operate at a constant level.

The National Manpower and Youth Council, in cooperation with foundryshop owners, is now laying the groundworks for the training of people in this field. With this program, the NMYC hopes to be able to introduce new ways of producing quality metal products at lower cost. The cooperation of the MIDC in this venture is being tapped.

6. Lineman Training Program — The NMYC proposes a program which will include the participation of the National Electrification Administration (NEA) and the Bureau of Vocational Education (BVE). The objectives of the program are the following:

a) To develop specific technical skills among youths and unemployed adults in the installation and maintenance of transmission and distribution network and generator sets of electric power systems;

b) To help promote the development of rural electric cooperatives in providing resources and/or facilities for training activities designed for the purpose; and

c) To foster close working relationships and coordination in planning, operation and administration of training activities designed for the promotion of rural electric cooperatives.

The maintenance of transmission lines and other aspects of the distribution network of an electric scheme is vital to the whole system. The safety of the system will depend largely on the quality of work performed by linemen.

7. Construction Workers (Housing Program) Training Program — The country's teeming rural and urban population is insufficiently housed. The problem is compounded by an increase in the need for skilled construction workers which, according to conservative estimates, runs to 180,000 for the next four years. The NMYC proposes a training program whereby unemployed manpower will be trained in building and construction skills to augment the inadequate supply of such skills. This program, which will span four years, is estimated to cost $.5 million.

8. Automotive Trade Skills Training Program —

a) **Automotive Parts Manufacturing.** With the help of the Automotive Parts Manufacturing Association (APMA), the NMYC will undertake a program of manpower training in this sector. It is expected that the APMA will take care of the equipment and facilities required, while NMYC will draw and develop relevant policies and project designs.

b) **Automotive Battery Manufacturing.** It is expected that the decrease in the circulation of new cars and the increase in auto repair jobs will bring about greater demand for batteries. A training program for people who will engage in battery manufacturing is therefore necessary, and to this end battery firms will be asked to offer their equipment and facilities for training purposes. The NMYC will take care of drawing policies and funding the project.

c) **Automotive Repair and Maintenance.** There is still a considerable dearth of mechanics, which is why it is imperative to boost training in this area. With the help of the Association of Auto and Repair and Maintenance Servicing firms, the NMYC plans to undertake such a training program.

9. Manpower Assessment Surveys and Studies — This comprehensive program of establishing and evaluating the manpower supply and demand situation of the economy will be undertaken by an inter-agency body with representation from both the public and the private sectors. All sectors of the economy will be covered, namely: mining and quarrying; manufacturing; electricity, gas, water and sanitary services; public services; transport and communications; and the agricultural sector. Presently, a study of the vocational training needs of industry (except agriculture and services) has been undertaken with the assistance of ILO and UNDP. A comprehensive study of manpower in the Philippine Civil Service will also be launched in May, 1971 in cooperation with the Civil Service Commission. Studies on the other sectors wll be undertaken by the same inter-agency group at an average cost of ₱150,000 per sector.

The compilation of manpower data, needless to say, is necessary if a credible perspective manpower plan and tenable manpower policy are to be formulated.

CHAPTER 15
Employment

1. UNEMPLOYMENT AND UNDEREMPLOYMENT SITUATION

The latest official surveys from the Bureau of the Census and Statistics placed total labor force in FY 1969 at 11.71 million (see Table 15.1). Of this estimate, 92.7 per cent (10.85 million) represented the employed segment and the remaining 7.3 per cent (.86 million) reflected the extent of unemployment. It must be noted, however, that the unemployment figures are prone to understatement or overstatement of the real conditions. Statistically, for instance, the unemployment coverage even includes unemployed persons who could be considered as unemployables by legal and cultural impositions. The labor age cohorts from between 15 and 19 years old (29.7 per cent of the unemployed) and even the 10-14 years old group (6.2 per cent of the unemployed) remain included in the statistical headcount (see Table 15.2). This, then, may have overstated the unemployment picture.

Underemployment, as indicated by the number of workers that are still seeking additional employment, was reported at 21.7 per cent (2.54 million) of labor supply. However, about 55.7 per cent (1.42 million) of the underemployed were already working at least 40 hours or more per week. It is a common characteristic of underdevelopment that some underemployment exists. In fact, it is natural to expect that as development proceeds a great deal of additional work may be created with erstwhile underemployed labor putting in more labor hours. It is important to emphasize that while 7.3 per cent of the labor force were considered unemployed there is also some sizable underemployment which tends to aggravate the proportion of the task of providing jobs for the economy.

A. Rural-Urban Distribution

In FY 1969, the labor force in the urban areas constituted 31.1 per cent of the total labor force, and 68.9 per cent were located in rural areas. In absolute terms, the urban labor subset accounted for 3.63 million. This segment displayed relatively high unemployment and underemployment rates of 9.1 and 16.5 per cent, respectively. About 61.8 per cent of the employed wanting additional work were already working 40 hours or more per week.

By comparison, the rural work force of 8.07 million subsumed an unemployment fraction of only 6.5 per cent (.53 million jobless). Rural areas, however, fared with a higher underemployment of 24.1 per cent (1.95 million). About 54.0 per cent of the underemployed were already working at least 40 hours or more per week.

B. Industrial Distribution

Of the 5.81 million persons actively engaged in agriculture and related activities, 27.0 per cent (1.57 million) were considered underemployed. On the other hand, only 20.8 per cent (.96 million) of the 4.67 million non-agricultural employees at work were so classified (see Table 15.3).

C. Regional Distribution

The regional fragmentation scheme in Table 15.4 reveals that unemployment ratios for the ten regions registered lowest for Southern Mindanao and Sulu (Region X) at 3.3 per cent, and highest for Ilocos-Mt. Province (Region II) at 10.2 per cent. For all the other regions the unemployment incidence ranged only from around 4 to 10 per cent.

While regional underemployment was also highest for Ilocos-Mt. Province (29.9 per cent of total persons at work), it was, however, lowest for Cagayan Valley and Batanes (8.2 per cent of total persons at work). For the rest of the regions, underemployment was contained to the range between 14 and 29 per cent of total employed persons at work.

2. SECTORAL SHIFTS IN EMPLOYMENT DISTRIBUTION

It might be useful to give a general picture of the employment flow over a ten-year spread.* Since the latest available fiscal figures go up to as late as 1969, the year 1959 was chosen as the base year for the ten-year coverage.

* Employment distribution data (Table 15.5) are based on BCS estimates of full-time equivalents in order to discount the effects of underemployment. However, corresponding data based on physical number of workers are also presented for purposes of comparison.

Referring to Table 15.5, agriculture absorbed the largest fraction of employment between FY 1959 and FY 1969 with an average share of 57.4 per cent. In that period, however, the labor share of agriculture and related sectors dropped from 60.8 to 53.5 per cent. This 7-point decrease was due to the faster rate of employment in non-agricultural sectors. Thus, while in absolute terms agriculture still employs the largest number of workers (refer to Table 15.3), its relative proportion is declining.

The combined industrial sectors (mining, manufacturing, construction, utilities, transport and commerce) employed the next largest component — 30.0 per cent of total full-time employment in FY 1969. This percentage share rose from 26.5 to 30.0 per cent in the period FY 1959-69.

Service industries (government, community, business, recreational, domestic personal services) also registered enlarged employment shares from 12.4 to 16.3 per cent during the period FY 1957-69.

Table 15.1—EMPLOYMENT, UNDEREMPLOYMENT, AND UNEMPLOYMENT SITUATION ACCORDING TO URBAN-RURAL STRUCTURES AS OF FY 1969
(In thousands, except percentages)

EMPLOYMENT STATUS	AVERAGE [1]	PERCENTAGE
PHILIPPINES		
Total Population, 10 years old & over	23,045	
In the Labor force	11,706	100.0
Employed (fully and partially)	10,851	92.7
At work	10,476	89.5
Not wanting additional work [2]	7,932	67.8
Wanting additional work and working 40 hrs. and over (per week)	1,420	12.1
Wanting additional work (visibly underemployed [3])	1,125	9.6
Working: (per week)		
Under 20 hours	265	2.3
20 to 29 hours	410	3.5
30 to 39 hours	451	3.8
Not reported	—	—
With a job, not at work	377	3.2
Totally unemployed	856	7.3
Worked before	373	3.2
Never worked before	483	4.1
Not in the Labor force	11,341	
URBAN		
Total Population, 10 yrs. old & over	7,945	
In the Labor force	3,638	100.0
Employed (fully and partially)	3,307	90.9
At work:	3,169	87.1
Not wanting additional work [2]	2,572	70.7
Wanting Additional work & working 40 hrs. and over (per week)	370	10.2
Wanting additional work (visibly underemployed [3])	229	6.3
Working: (per week)		
Under 20 hours	56	1.5
20 to 29 hours	92	2.5
30 to 39 hours	82	2.2
Not reported	—	—

Table 15.1 (*Cont'd.*)

EMPLOYMENT STATUS	AVERAGE [1]	PERCENTAGE
With a job, not at work	138	3.8
Totally unemployed	331	9.1
Worked before	129	3.5
Never worked before	202	5.6
Not in the Labor force	4,309	
RURAL		
Total Population, 10 yrs. old & over	15,100	
In the Labor force	8,068	100.0
Employed	7,544	98.5
At work	7,307	90.6
Not wanting additional work [2]	5,361	66.4
Wanting additional work and working 40 hrs. and over (per week)	1.050	13.0
Wanting additional work (visibly underemployed [3])	896	11.1
Working: (per week)		
Under 20 hours	209	2.6
20 to 29 hours	318	3.9
30 to 39 hours	369	4.6
Not reported	—	—
With a job, not at work	239	2.9
Totally unemployed	525	6.5
Worked before	244	3.0
Never worked before	281	3.5
Not in the Labor force	7,031	

[1] Average of October 1968 and May 1969 figures.
[2] Includes persons for whom there was no report as to whether or not they wanted additional work.
[3] Employed persons, worked less than 40 hours per week, reported as wanting additional work.

Source: The BCS Survey of Households Bulletin, October 1968 and May 1969.

It is clear from Table 15.5 that the distribution of industrial employment has been undergoing a definite shift from agriculture and related sectors into industry and services.

3. EMPLOYMENT CHALLENGE, FY 1972-75

The absorption of about one million currently jobless workers and the generation of additional employment for more than 3 million underemployed laborers, not to mention another 2 million "entrants" to the labor force (see Table 15.6) in the next four years, are definitely beyond the feasible capacity of the public sector. The government now directly provides around 5 per cent of total employment. It has no plan to expand this percentage level and will leave the provision of additional employment to the private sector.

Therefore, for the Plan period (FY 1972-75), the herculean task of providing 3 million new jobs and additional workload for the underemployed — another 3 million — is rendered a private function. However, the government has to create the necessary conditions and formulate proper policies conducive to higher levels and faster rates of employment in the private sector.

The macro-model predicts job creation in the order of 2.3 million within the next four fiscal years. This is deemed conservative because estimates were computed in the context of a continued capital-biased economy (i.e., based on historical parameters). The structural

changes proposed in the Plan to relieve the capital bias will surely allow actual employment to surpass projections and make the problem less serious.

Based on the macro-relationships derived, expansionary monetary policy could cause significant increases in employment. However, the adverse impact on prices of expansion in money supply restrains the use of this measure.

The 2.3 million new jobs concern only visible unemployment which refers to individual headcount. Presumably, the incidence of underemployment (hidden unemployment) would continue to rise since it is believed that the country is in that development stage where faster economic growth will surely entail even faster rates of underemployment even as unemployment is being reduced. This means newly absorbed labor will not yet be fully employed until after some lag time.

For policy-making purposes, it is important to first identify sectors with the highest labor-absorptive capacities in relation to the available resources. The most likely candidates would then be the agrindustrial industries that perform intermediate processing activities midway between supplying raw materials and assembling finished products. These are industries that link internal supplies with demand (both internal and external).

In this regard, the agrindustries, such as those in the BOI's preferred investments, along with the expansion of exports in primary, semi-processed, and extractive goods, would provide larger employment opportunities.

Moreover, it must be pointed out that the growth or survival of most import-substituting industries also depends greatly on backward integration. Since foreign exchange earnings constitute the main bottleneck to some import-substituting activities, export promotion and industrial integration are being embraced as direct and immediate measures for the expansion of the industrial sector and for the generation of productive employment.

Likewise, the whole success of the integrated agrindustrial complex depends heavily on aggressive support from agriculturally-based industries. Agricultural development will therefore propel the industrial boom in terms of increased industrial outlets and consumption requirements.

As has been discussed elsewhere in the Plan, prejudices towards import-dependent industrialization in the postwar economy have unduly encouraged investments to less socially productive and capital-intensive activities. These activities were also encouraged to situate in urban areas. Together with the lure of better opportunities in the urban sector, this encouraged widespread emigration of workers to the cities, thereby causing undue harm to balanced regional development.

It is interesting to note that underemployment in agriculture has been high (see Tables 15.3 and 15.7), while unemployment of the experienced agricultural labor force has been mild at 2.6 per cent (see Table 15.8). To comprehend this, the seasonal character of most Philippine agricultural activities must be recognized. This is a result of peak labor requirements during planting and harvesting periods in monsoon paddy-rice agriculture when even workers from other industries have to be recruited.

Presumably, acute underemployment can be cut tremendously through concerte programs designed to minimize seasonality in agriculture. In this regard, diversified multi-croppings which increase labor demand during off-season months (without adversely affecting the demand for labor in regular-season months) may be

Table 15.2—UNEMPLOYED PERSONS BY AGE GROUP FOR THE PHILIPPINES AS OF FY 1969*
(In thousands, except percentages)

AGE GROUP	TOTAL UNEMPLOYED NUMBER	TOTAL UNEMPLOYED PER CENT	WORKED BEFORE NUMBER	WORKED BEFORE PER CENT	NEVER WORKED BEFORE NUMBER	NEVER WORKED BEFORE PER CENT
10-14	53	6.2	17	4.5	36	7.4
15-19	254	29.7	79	21.2	175	36.2
20-24	202	23.6	77	20.6	125	25.9
25-44	260	30.4	143	38.3	117	24.3
45-64	82	9.5	52	14.0	30	6.1
65-over	5	.6	5	1.4	—	.1
TOTAL	856	100.0	373	100.0	483	100.0

* Average figures for May and October 1968.
Source: The BCS Survey of Households Bulletin, October 1968 and May 1969.

resorted to. Furthermore, short-season crop varieties, which allow for more staggering of the planting and harvesting schedule within the same season, could increase employment opportunities. These technological changes will offset seasonality while not necessarily worsening the unemployment problem, and shift labor displaced temporarily from threshing, weeding and plowing to more productive activities like planting, fertilizing and harvesting. This means to say that labor will necessarily be a complementary input to any economically-induced technological change instead of being replaced by it. Similarly, social overhead capital, such as rural public works, infrastructures, and other forms of governmental participation in the long-awaited Green Revolution, could generate multiplier effects on the production and employment in agriculture with spill-over effects on the industrial sector.

The aforesaid statement of employment promotion strategy will remain incomplete without a reference to the population growth problem which affects the labor force in the long run. The President set up the Commission on Population in May 1970. It is expected that in the course of time its programs will be widely disseminated to the public. Well-founded programs of population control will have their bearing on labor force growth ten to fifteen years hence. It is encouraging that the orthodoxy about population control is generally diminishing and that a view favoring family planning is developing, especially in the urban areas.

Table 15.3—PERCENTAGES OF UNDEREMPLOYED PERSONS AT WORK IN AGRICULTURE AND NON-AGRICULTURAL INDUSTRIES, BY REGION, FY 1969*
(In thousands, except percentages)

REGIONAL GROUPING	TOTAL ALL INDUSTRIES		AGRICULTURE		NON-AGRICULTURE	
	NO. OF PERSONS AT WORK	WANTING ADD'L WORK (PER CENT)	NO. OF PERSONS AT WORK	WANTING ADD'L WORK (PER CENT)	NO. OF PERSONS AT WORK	WANTING ADD'L WORK (PER CENT)
PHILIPPINES	10,476	24.2	5,808	27.0	4,668	20.8
1. Manila & Suburbs	977	13.0	13	15.3	964	12.9
2. Ilocos-Mt. Province	605	29.9	395	34.6	210	20.9
3. Cagayan Valley & Batanes	315	8.2	241	6.6	74	13.5
4. Central Luzon	1,356	27.6	614	26.3	742	28.4
5. Southern Luzon & Islands	1,221	29.1	554	35.0	667	24.2
6. Bicol	992	25.6	683	28.8	309	18.4
7. Western Visayas	1,294	26.5	832	29.5	462	21.2
8. Eastern Visayas	1,626	29.1	1,004	33.4	622	22.1
9. Northern Mindanao	782	27.5	485	28.6	297	25.9
10. Southern Mindanao & Sulu	1,308	14.4	987	13.8	321	16.1

* Average of October 1968 and May 1969 figures.
Source: Bureau of the Census and Statistics.

Table 15.4—EMPLOYED AND UNEMPLOYED PERSONS BY REGIONS, FY 1969*
(In thousands, except percentages)

REGION	IN THE LABOR FORCE	TOTAL UNEMPLOYED	
		NUMBER	PER CENT OF LABOR FORCE
PHILIPPINES	11,706	856	7.3
I. Manila & Suburbs	1,105	100	9.0
II. Ilocos-Mt. Province	705	72	10.2
III. Cagayan Valley & Batanes	340	16	4.7
IV Central Luzon	1,565	130	8.3
V. Southern Luzon & Islands	1,419	140	9.8
VI. Bicol	1,101	74	6.9
VII. Western Visayas	1,428	94	6.5
VIII. Eastern Visayas	1,827	152	8.3
IX. Northern Mindanao	834	34	4.0
X. Southern Mindanao and Sulu	1,382	46	3.3

* Average of October 1968 and May 1969 figures.
Source: The Bureau of the Census and Statistics Survey of Households Bulletin, October 1968 and May 1969.

Table 15.5—DISTRIBUTION OF FULL-TIME EMPLOYMENT EQUIVALENT AND EMPLOYED PERSONS AT WORK BY MAJOR INDUSTRY GROUP, FY 1959-69

MAJOR INDUSTRY GROUP	FULL TIME EQUIVALENT			EMPLOYED PERSONS AT WORK		
	FY 1959-69 AVERAGE	FY 1959	FY 1969	FY 1959-69 AVERAGE	FY 1959	FY 1969
1. Agriculture, forestry, hunting and fishing	57.4	60.8	53.5	59.4	63.0	55.4
2. Mining and quarrying	.4	.4	.4	.3	.4	.4
3. Construction	2.9	2.1	3.3	2.7	2.0	3.2
4. Manufacturing	10.9	10.6	11.3	11.5	11.1	11.7
5. Electricity, gas, water and sanitary services	.3	.3	.3	.3	.3	.3
6. Commerce	10.6	10.0	10.7	10.2	9.5	10.4
7. Transport, storage and communication	3.7	3.0	4.0	3.2	2.7	3.4
8. Gov't., community, business and recreational services	5.8	5.4	7.6	5.3	4.9	7.5
9. Domestic services	5.4	4.8	6.3	4.1	3.5	4.9
10. Personal services other than domestic	2.2	2.3	2.3	2.1	2.2	2.3
11. Industry not reported	.2	.2	.3	.3	.3	.3

Source: Bureau of the Census and Statistics.
N.B. Due to rounding, the figures may not always add up to 100.0 per cent.

Table 15.6—ESTIMATED POPULATION, LABOR FORCE AND EMPLOYMENT, FY 1966-69
(In thousands, except percentages)

	ACTUAL ESTIMATE				PROJECTED	
	FY 1966	FY 1967	FY 1968	FY 1969	FY 1971	FY 1975
Total Population	32,246	33,218	34,218	35,349	37,404	42,118
Ten Years & over	20,606	21,519	21,816	23,044	24,676 [1]	28,295 [1]
Labor Force	11,325	12,515	12,655	11,706	13,671 [2]	15,675 [2]
Employment	10,566	11,560	11,674	10,851	12,508 [3]	14,845 [3]
Unemployment	758	955	981	856	1,163	830
Unemployment Rate	6.6	7.6	7.7	7.3	8.5	5.2
Participation Rate	54.9	58.1	58.0	50.7	55.4	55.4
Invisibly Underemployed [4]	1,456	1,704	1,612 [6]	1,420	1,726 [7]	2,049 [7]
Per cent of the Employed	13.7	14.7	14.0	13.0	13.8	13.8
Visibly Underemployed [5]	1,058	1,190	1,454 [6]	1,125	1,351 [7]	1,603 [7]
Per cent of the Employed	10.0	10.2	12.6	10.3	10.8	10.8

[1] Based on FY 1957 to FY 1969 average annual growth rate of 3.48 per cent.
[2] Based on participation rate of 55.4 (the average from FY 1966 to 1969). The participation rate from FY 1956 to FY 1968 averaged about 56.9 per cent; there is, an indication that this may decline.
[3] As projected by the Macro-model in this Plan.
[4] Employed persons, worked at least 40 hours or more, reported as wanting additional work.
[5] Employed persons, worked less than 40 hours, reported as wanting additional work.
[6] Calendar Year Data due to absence of October 1967 figures.
[7] Based on assumed percentage of underemployment average of 13.8 (invisible) and 10.8 (visible) from FY 1966 to FY 1969. Unvisible underemployment rate increased from 6.6 per cent in FY 1956 to 13.0 per cent in FY 1969. Visible under employment, however, was observed to be within the range of 10 to 14 per cent; there is no indication of long-run trend in either direction.

Source: Bureau of the Census and Statistics

Table 15.7—EMPLOYED PERSONS WHO WORKED ANY TIME DURING THE PAST 12 MONTHS BY NUMBER OF WEEKS WORKED FOR AT LEAST 40 HOURS BY MAJOR INDUSTRY GROUP DURING THE SURVEY WEEK, OCTOBER 1966

	NUMBER OF WEEKS WORKED FOR AT LEAST 40 HOURS				
	LESS THAN 4 WEEKS	4 TO 19 WEEKS	20 TO 39 WEEKS	40 TO 52 WEEKS	TOTAL
	(IN PERCENTAGES)				
1. Agriculture, forestry, hunting and fishing	6.2	16.4	29.7	47.7	100.0
2. Mining and quarrying	—	11.1	4.8	84.2	100.0
3. Construction	2.0	11.1	25.6	61.4	100.0
4. Manufacturing	5.7	13.1	35.4	55.8	100.0
5. Electricity, gas, heat, water and sanitary services	—	7.0	7.6	85.4	100.0
6. Commerce	6.9	11.1	19.1	63.0	100.0
7. Transport, storage and communication	1.8	4.3	12.9	80.9	100.0
8. Government, community business and recreational services	2.0	4.8	7.0	86.3	100.0
9. Domestic services	2.1	7.3	13.5	77.2	100.0
10. Personal services other than domestic	6.7	13.4	20.0	59.9	100.0
11. Industry not reported	12.1	22.4	46.6	18.9	100.0

Source: The BSC Survey of Households Bulletin, October 1966, Series No. 21; the figures are derived from the data of Table 41.
N.B. Due to rounding, the figures do not always add up to 100.0 per cent.

Table 15.8—EMPLOYED AND UNEMPLOYED PERSONS IN THE EXPERIENCED LABOR FORCE* BY MAJOR INDUSTRY GROUP, FY 1969
(In thousands, except percentage)

	NUMBER	PER CENT UNEMPLOYED
TOTAL	11,225	3.3
Agriculture, Forestry, hunting and fishing	6,140	2.6
Mining and Quarrying	49	6.1
Construction	378	8.4
Manufacturing	1,305	3.2
Electricity, gas, water and sanitary services	34	5.8
Commerce	1,161	3.6
Transport, storage and communications	390	4.6
Government, community, business and recreational services	926	3.6
Domestic services	543	5.1
Personal Services other than domestic	254	2.3
Industry not reported	45	13.3

* The Experienced Labor Force consists of the employed workers plus the unemployed who worked before for at least two consecutive weeks on full-time basis.

Source: The Bureau of the Census and Statistics Survey of Households Bulletin, October 1968 and May 1969.

CHAPTER 16
Family Planning

An important consequence of the improvement in the country's socio-economic condition is the increased survival rate of infants and the reduction in mortality rates at all ages. Fertility rate has remained more or less constant in the past 70 years. Nowadays, women do not have to bear ten or more children in order for them to be assured of a few survivors in their families. Medical knowledge and application has significantly reduced mortality rate and raised life expectancy from 37.2 years in 1905 to 52.5 years in 1965. In the aggregate, the reduction in mortality rate, given a constant fertility of about 45 per thousand, is reflected in the rapid increase in population growth.

	MORTALITY RATE (%)	POPULATION RATE (%)	POPULATION (IN MILLION)
1939	16.9	2.2	16.00
1948	12.7	1.9	19.23
1960	6.6	3.1	27.09
1970	7.1	3.1	37.09

In the past, health programs have been geared to a reduction in mortality or to remedying sickness and preventing death. The direct impact on population growth of these programs has been ignored for one reason or another. However, there is now some realization of the economic cost to the family and to the nation of this high population growth.

Through the mass and other media, Philippine families have become aware of the advantages and techniques of family planning. They have also become aware, even if vaguely, of the alternative uses to which their resources may be spent. Since the problem of mere survival has already been solved, families can look forward now to the challenge of improving their lot. This involves planning the use of available resources to maximize the well-being of the family over its lifetime. Some of the alternative uses of a family's resources are for food, medical services, and education. The average income of more than fifty per cent of Philippine families will not allow for expenditures beyond bare necessities unless the size of the family is reduced. The choice facing most families boils down to quality versus quantity; or better health and education for a smaller family against a life of subsistence for a large one.

At the national level, the cost of rapid population growth is indicated in a low growth rate of per capita income — about two per cent per year. National income is growing at about five cent a year. Since the population growth is three per cent a year, the per capita growth is only at about two per cent. Any reduction in population rate would in general mean a higher growth in per capita income.

A rapidly growing population results also in a disproportionately large dependent population. About 47 per cent of the population is under 15 years of age. At the same time, there is already a high rate of unemployment of the working age population. The younger age group has to be fed and educated. The resources for feeding and educating them at the elementary and high school levels have important alternative uses — more state-supported higher education, hospital space, housing, roads, etc. The alternative uses of the resources consumed by the young age group are development expenditures for the older age group of the population — education, health and employment.

In the past five years or earlier, the population problem has attracted increasing public attention. Until the creation of the Population Commission, population control programs have been undertaken by private organizations, mainly by the Family Planning Organization. There seems to be a ready acceptance of the idea as evidenced by a lack of criticism in publications on the subject.

1. POPULATION COMMISSION

On July 17, 1971, Congress passed the law creating the Population Commission (R.A. 6365). This Commission replaced the ad hoc committee created by Executive Order No. 233 and puts the imprint of Congressional policy endorsing population planning in the Philippines, a program already initiated by the Executive as early as 1970. The Commission is vested with the following duties:

1. To formulate and adopt coherent, integrated and comprehensive long-term plans, programs and recommendations on population as it relates to economic and

social development consistent with and implementing the population policy, which shall be submitted to and approved by the President, upon recommendation of the National Economic Council;

2. To receive and approve project proposals and to coordinate and evaluate their implementation in accordance with approved plans and programs;

3. To put up family planning clinics in operation with the Department of Health;

4. To undertake such action projects as are necessary;

5. To undertake, promote, and publish studies and investigations on Philippine population in all its aspects;

6. To assemble and disseminate technical and scientific information relating to medical, social, economic and cultural phenomena as these affect or are affected by population;

7. To submit an annual report to the President and to Congress on plans, programs, and progress of population activities. For this purpose, the Commission may require all agencies concerned to provide information necessary in the preparation of said report;

8. To adopt rules of procedures for its government;

9. To receive and accept from sources within and without the Philippines for its own use and not for sale, grants or donations of equipment, materials, or services. Such grants or donations shall be exempt from gift taxes and deductible from the net taxable income of the grantor or donor and the donee, upon certification of the Commission; and

10. To perform such duties as proper authorities may from time to time direct the Commission to undertake.

The Commission may call upon any department, bureau, office or agency or instrumentality for such assistance as it may require in the performance of its functions.

The Population Commission undertakes a program on family planning which consists of four major activities:

a) Information/education/communication
b) Training
c) Clinic services
d) Research and Evaluation

This program aims, among others, to:

a) promote a board understanding of the effects of alternative rates of population growth on family and national welfare;

b) integrate population and family planning in the educational program of the country;

c) provide adequate, safe and effective means to couples desiring to space or limit family size; and

d) reduce mortality and morbidity rates.

2. PROGRAM ON FAMILY PLANNING

A. Information/Education/Communication

Three government agencies are engaged in the information education program, namely, the National Media Production Center, the University of the Philippines Institute of Hygiene, and the Department of Social Welfare. From the private sector, the Social Communications Center and the Philippine Women's University work jointly with the Department of Education in pursuance of this program.

The Department of Social Welfare tests the effects of family planning information and motivation programs. The UP Population Institute undertakes demographic studies on various aspects of family planning while the PES-DND Computer Center provides for the maintenance of a computerized file of acceptors and clinic records on a current basis.

Population/family planning and all its aspects are to be integrated in the medical curriculum. The assistance of the Board of Medical Education will be sought to bring about this change in the shortest possible time. Simultaneously there will be an increased integration of population education in existing courses at the primary, secondary and higher education levels. Graduate studies in the various disciplines of population will also be encouraged to support and strengthen teaching institutes.

B. Training

The training of medical personnel and motivators for family planning is conducted through such organizations as the Institute of Maternal and Child Health, the Family Planning Organization of the Philippines, and World Neighbors. In the public sector, the training of medical and para-medical personnel is conducted by the Department of Health, while that of social workers and welfare aides is done by the Department of Social Welfare. By June 1971, training organizations will have completed the training of 3,250 doctors, 2,019 nurses, 4,475 motivators, social workers, and decision-makers.

Training will be programmed to meet the number of personnel required by the new clinics. Refresher courses will also be programmed for the personnel of older clinics.

C. Clinic Services

At present there are 870 family planning clinics distributed in the different parts of the country. Each of these clinics has at least a doctor, nurse, midwife, and a health educator.

The private organizations and institutions which operate family planning clinics are:

1. Philippine Medical Association	54 clinics
2. Institute of Maternal & Child Health ...	103 clinics
3. Family Planning Organization of the Philippines	59 clinics
4. Pathfinder Fund	46 clinics
5. Asian Social Institute	24 clinics
6. Siliman University	12 clinics
7. Philippine Rural Reconstruction Movement	8 clinics
8. Dansalan Junior College	2 clinics
9. World Neighbors	2 clinics

The Responsible Parenthood Council which advocates the rhythm method operates in cooperation with the Department of Education in four provinces. It has a target population of 900,000 women. In the public sector, the Department of Health has integrated family activities in at least 200 rural health units; the University of the Philippines in 8; and the Philippine Land Reform Council in 2 clinics.

At the local community level the Manila City Health Department operates 40 clinics. The following is the breakdown of clinics operated by Health Departments in other places: Nueva Ecija — 30, Laguna — 17, Davao City — 5, and Angeles — 3.

Today, there are more private clinics than government clinics (Rural Health Units) offering family planning services. However, the Department of Health estimates that they will have integrated family planning services in at least 200 Rural Health Units by the end of FY 1972. By the end of the four-year program, most, if not all, of the 1,400 Rural Health Units will have integrated family planning in their maternal and child health services.

In keeping with the population policy, multi-method clinics and/or referral systems will offer services (education or medical) on all methods of family planning.

D. Research and Evaluation

The Bureau of the Census and Statistics hopes to improve the registration coverage of births and deaths to an acceptable level, in the vicinity of 90 per cent by 1975.

3. SPECIFIC TARGETS AND STRATEGIES

A. Targets

The 1970 census gave a preliminary count of about 6.2 million families. It is estimated that around 2,730,000 family planning acceptors can be registered by the end of FY 1975, assuming that there will be 1,870 clinics by FY 1974. This would mean that more than 50 per cent of eligible women will have, at least at one time, accepted a method of family planning. Acceptance is defined as having visited a family planning clinic. Hence there is considerable uncertainty regarding the exact impact that this number of acceptors would have on the growth rate. High-level estimates show at least a 0.4 percentage point drop from 3.1 per cent to 2.7 per cent by the end of FY 1975. On the other hand, lower limit estimates indicate the possibility of a close to .8 percentage point drop from 3.1 per cent to 2.3 per cent. The detailed breakdown is shown on the following page.

It is possible that the optimistic 2 per cent reduction in the growth rate by 1978 or, at the very latest, by 1980, may be achieved if the resources supporting family planning continue to obtain, if not increase.

Presently, clinical targets are expressed in terms of new acceptors (see Table 16.1 and Figure 16.1). It is hoped, and reasonably so, that the rate of new acceptances would number some 50,000 per month by the advent of 1973. This figure, however, would include the dropout segment; and to this extent, the target, as an indicator, is limited. In the future, it is hoped that the targets could be modified by converting simple "acceptors" into "continuing users", if empirical data allow. Steps have been taken to collect the needed information.

The preceding discussion does not eliminate the possibility of costs increasing for every new additional acceptor, a matter which is presently under study.

If the 1973 target rate of 50,000 is achieved, a significant drop in the population rate of at least one per cent (3.1 to 2%) may reasonably be expected. Of course, the feasibility of the 50,000 level target will depend as much on the amount of resource inflow obtaining as on other factors already cited.

There are indications to show that the population rate has been held in check. Contrary to 1965 predictions, the rate has not only decelerated but has also been presently stabilized at 3.1 per cent. These early victories should allow demographic planning to overcome all initial cynicism.

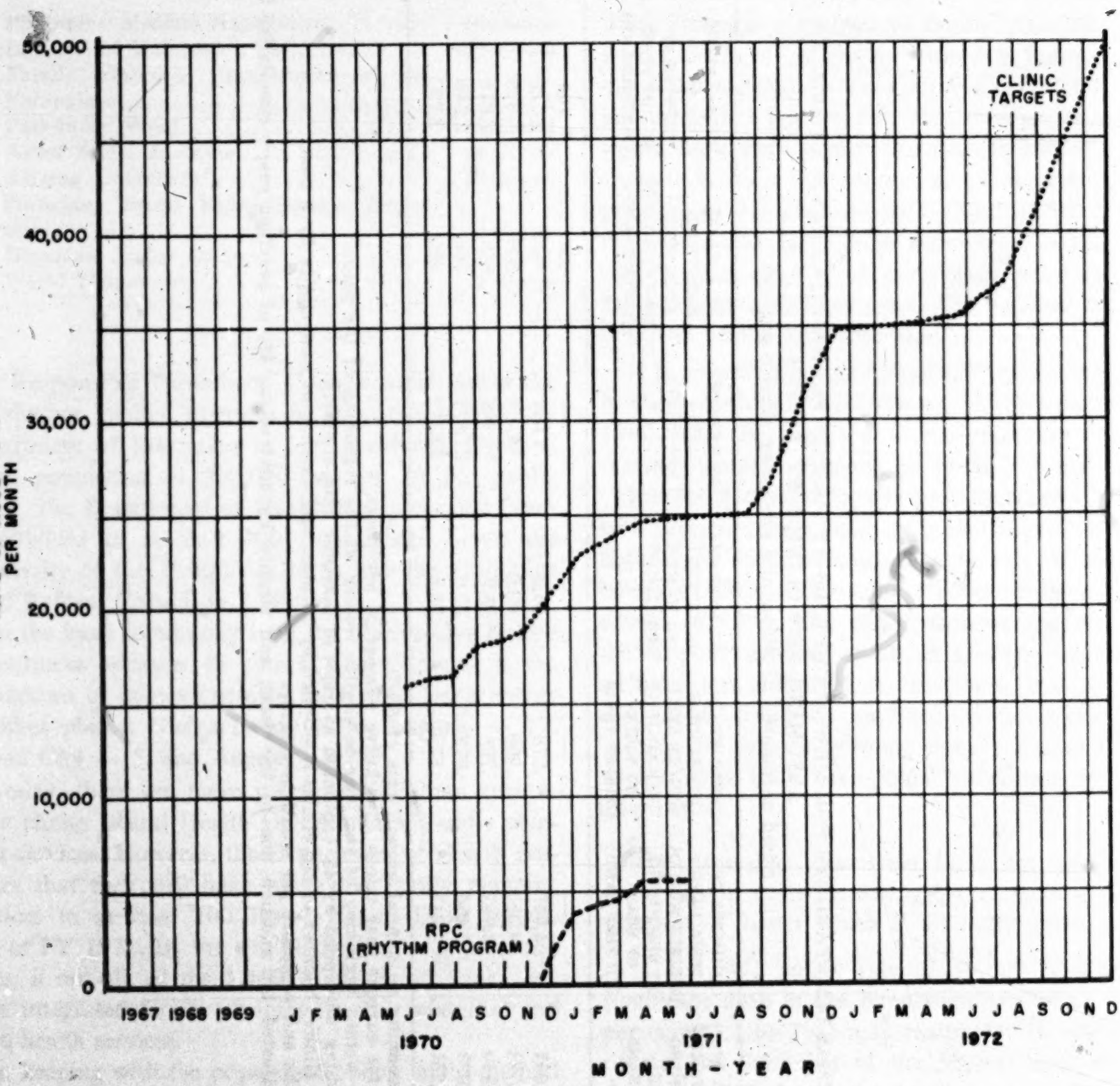
TABLE 16.1--TARGETS FOR NEW ACCEPTORS AT FAMILY PLANNING CLINICS, FY 1972-75
ASSUMING 1,870 CLINICS BY FY 1974
(Based on number of clinics and remaining eligible women)

FISCAL YEAR	NUMBER OF ELIGIBLE WOMEN AT BEGINNING OF YEAR[1] (IN THOUSAND)	NUMBER OF REMAINING ELIGIBLE WOMEN AT BEGININNG OF YEAR[2] (IN THOUSAND)	PROPORTION OF ELIGIBLE WOMEN STILL REMAINING AT BEGIN-NING OF YEAR[3]	NUMBER OF ACCEPTORS PER MONTH PER CLINIC[4]	NUMBER OF CLINIC MONTHS[5]	NUMBER OF REGISTERED ACCEPTORS DURING THE YEAR[6] (IN THOUSAND)	CUMULATIVE NO. OF AC-CEPTORS AT END OF YEAR[7] (IN THOUSAND)	NUMBER OF CLINICS TO BE ADDED ANNUALLY	CUMULATIVE NUMBER OF CLINICS
1970	—	—	—	—	—	100	100	—	—
1971	4,647	4,547	.978	44.0	7,847	345	441	—	870
1972	4,791	4,350	.908	40.9	14,076	576	999	400	1,270
1973	4,940	3,943	.798	35.9	18,876	678	1,637	400	1,670
1974	5,093	3,456	.679	30.6	21,876	669	2,240	200	1,870
1975	5,251	3,011'	.573	25.8	22,476	580	2,730	0	1,870

[1] 12.5% of the population, assuming an annual growth rate of 3.1%.
[2] Number of eligible women for current year minus cumulative number of acceptors.
[3] Ratio of remaining eligible women beginning of the year to eligible women at the beginning of the year.
[4] Proportion of women remaining multiplied by 45 (optimum average of acceptor rate/clinic).
[5] Allowance is given for new clinics. Number of old clinics multiplied by 12 mos. and number of new clinics by 9 mos.
[6] Estimated from clinic months and acceptors per month per clinic.
[7] Cumulative acceptors is adjusted for addition due to the death and steriliy by subtracting 4% of previous year's cumulative figure before adding the current year's figure.

Figure 16.1

PLANNED MONTHLY RATE OF ACCEPTANCES WITH AN AVERAGE MONTHLY TARGET OF 50,000 BY FY 1973


50,000
40,000
30,000
20,000
10,000
0
RATE OF ACCEPTORS PER MONTH
CLINIC TARGETS
RPC (RHYTHM PROGRAM)
1967 1968 1969 J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1970
1971
1972
MONTH - YEAR

MONTHLY AVERAGE FOR YEAR

B. Strategy

The population problem is multi-dimensional and multi-faceted in nature and, as such, requires a multi-disciplinary approach. Simultaneous and proportionate efforts are necessary in the four main areas of the population program: clinical services, training, education/information/communication, and research. A precise balance of these ingredients is imperative to achieve maximum effect.

Much of the strength of the population program has thus far come from the private sector and will continue as such for a number of years. However, with government participation coming in, the program will henceforth be a joint effort of the government and the voluntary organizations and institutions.

4. FINANCING REQUIREMENTS

Due to the present constraints on government financial resources, the population program has and will continue to rely heavily on foreign assistance for a number of years. However, there is a need to increase government input to encourage continued funding from external sources such as the United States Agency for International Development (U.S. AID) and the United Nations (UN) and its specialized agencies. The large bulk of assistance has come from U.S. AID. As the population planning bill becomes a law, more domestic financial support is likely to come. A better balance between external assistance and local funding will be sought so that the Philippines can eventually shoulder a large amount of the cost. (See Table 16.2.)

Table 16.3 is a summary of the estimated expenditures of the four-year program (FY 1972-75). A total of ₱259,866,134 is required to finance the program. The distribution of expenditures is as follows: 1.5 per cent for administration; 56.1 per cent for clinics; 16.2 per cent for training; 8.4 per cent for research; and 17.8 per cent for information/education/communication. The unit costs of clinics are based on present expenditures. The increase in budgetary outlay is based on the number of clinics to be established. Estimated expenditures for the training program include training costs of personnel that will cover the expansion of clinics, re-training of old personnel, and training-motivation program of the Responsible Parenthood Council, and are based on the expansion program clinics up to 1974.

However, for FY 1975 the increase in the budgetary outlay is based on the percentage increase in cumulative acceptors. In research, the annual percentage increases over our present expenditures totalling ₱4,212,788 have been programmed at 20, 50, 30, and 20 for the Plan period. It is expected that the first two years, with a peak load in FY 1973, will require more research efforts before a gradual decline can be realized.

TABLE 16.2—SOURCE OF FUNDS
(In million pesos)

	1972	PROPOSED INCREASE	1973	PROPOSED INCREASE	1974	PROPOSED INCREASE	1975	TOTAL INCREASE
Proposed Government Direct Budgetary Appropriation for population[1]	6.0	3.0	9.0	4.0	13.0	1.0	14.0	8.0
External Assistance:								
1. U.S.AID	30.0	—	28.0	—	25.0	—	25.0	—
2. Others	9.3	17.9	27.2	6.7	33.9	5.4	39.3	30.0
Total Direct Expenditures[2]	45.3	20.9	64.2	10.7	71.9	6.4	78.3	38.0

[1] Direct Government appropriation is expected to start in FY 1972.
[2] Includes Government and private costs.

Table 16.3—SUMMARY OF ESTIMATED EXPENDITURES, FY 1972-75

PROGRAMMED EXPENDITURES	1972	1973	1974	1975	TOTAL
Administration	₱ 700,000	₱ 840,000	₱ 1,008,000	₱ 1,209,600	₱ 3,757,600
Clinics	24,067,100	33,959,300	41,635,000	46,166,000	145,827,400
Training	7,156,518	12,156,518	11,661,518	11,166,518	42,141,072
Research	5,056,000	6,320,000	5,477,000	5,056,000	21,909,000
Information, Education, Communication	8,369,793	10,964,429	12,170,516	14,726,324	46,231,062
TOTAL	₱45,349,411	₱64,240,247	₱71,952,034	₱78,324,442	₱259,866,134

CHAPTER 17
Housing Program

The national housing need has been estimated at about 470,000 dwellings per annum, both urban and rural. The urban need is about 100,000 dwellings per year. Although relatively smaller in number, the urban problem is more serious because higher urban standards require more expensive dwellings and lots. Moreover, migration from the rural areas accentuates the housing requirements of the slums and squatter dwellers. According to a 1968 survey, there were about 180,000 squatters and slum families in Metropolitan Manila.

It is estimated that only 12 per cent of the urban families can afford housing at open market prices of about ₱17,500 for house and lot. About 23 per cent more can afford mass-produced housing on government-owned or government-controlled land financed by government supported loans. The remaining 65 per cent will require subsidized housing.

Only about 11,600 building permits were issued in 1970 in the large cities and towns whose population constituted about 15 per cent of the total population. The number of constructions in these places would amount to about 2 new dwellings per 1,000 population instead of the 12 per 1,000 estimated requirement. In 1970, the government resettled 1,200 families in the Carmona Resettlement project, and built there 78 relief houses mostly from civic contributions. The government also erected 110 economic housing units in PHHC and GSIS housing projects in Caloocan and Davao. In addition, SSS, GSIS and DBP issued 7,531 housing loans totalling ₱179 million. Although the entire government housing effort benefited 11,700 families, a substantial accomplishment compared to previous performance, this is still far below the housing need of urban areas.

1. THE FOUR-YEAR PROGRAM

The National Housing Program covers (1) social housing financed and built by the government, (2) economic housing financed and built by the government, and (3) privately-owned housing financed by the government.

Social housing will include the resettlement of squatter families in the remaining portions of Carmona Resettlement Project, and the opening of new resettlement areas in Montalban and Cebu in lands already reserved for this purpose. Two thousand nine hundred (2,900) hectares of public land in Montalban was programmed for resettlement and housing in 1970. This resettlement program will benefit about 20 thousand families at a total cost of ₱1.51 million. The social housing portion also includes the construction of tenement housing in portions of the Tondo Foreshore that are still available for development. Social housing is primarily funded by appropriations, but the Tondo Foreshore Tenement will be funded initially with bond funds, and later by allocation from the NHC.

The economic housing program will cover the housing development on lands already owned by the PHHC, GSIS and SSS, most of which are in the Metropolitan Manila area. NHC home or building components shall be used in the construction of these houses.

The National Housing Corporation (NHC) was organized in 1968 with GSIS, SSS, DBP and PNB contributing a total capital subscription of ₱100 million. In 15 months, it completed the construction of its plant complex for the production of various housing components. There are at present four plants in operation out of its seven projected plants. Its scheduled production capacity of 20 per cent in 1971 should increase to its maximum programmed capacity of 12 thousand new dwellings a year by 1973. The NHC, as originally planned, was to manufacture 80 per cent of the components for the construction of private houses financially assisted by the housing corporation.

The government financing of private home construction, usually in the form of individual loans to GSIS and SSS members, will now take a new form. To achieve economies of scale that will be passed on to the homebuyers, both GSIS and SSS will finance private housing development complexes, the units of which will be sold to GSIS and SSS members, who in turn will transfer their mortgages to these government institutions. If there are not enough private developers, GSIS and SSS institutions will put up their own developments. Both institutions, as stockholders of NHC, will naturally use or require utilization of NHC houses or components. Hence, in the program, GSIS, SSS and PHHC investments include the construction of houses to be purchased from NHC. Since

NHC provides logistical support to the implementing agencies, its estimated output of 12,000 houses a year is absorbed and included in the programmed investments of the GSIS, SSS, and PHHC outlay which represent a combined total of 117,540 dwellings and involve a financial outlay of about ₱1.972 million during the period.

The proposed law for the creation of the NHC provides funds for social, as well as for economic, housing. The NHC will draw its financial resources from the new taxes enumerated below. Dwellings produced with tax funds are part of government-financed projects. When enough mortgages are contracted, NHC will issue and insure financial instruments called participation or share in the pool of consolidated mortgages and sell these insured instruments with tax incentives to private investors. Hence, part of the future home production attributable to NHC will be financed by private investors. However, this phase will probably start beyond the program period contemplated herein, since the first year will be spent for organization as well as the collection of taxes for its operation, the second year for erecting or financing NHC initial projects, and the third and fourth years for accumulating a pool of mortgages that may be offered to private investors in the fifth year.

2. NEW SOURCES OF FUNDS

There will be a renewed effort to increase private capital participation in the production of houses, thru the establishment of a workable secondary mortgage system that would ensure liquidity of mortgages serviced by private financing institutions and adequate interest subsidy or incentives to insure fair returns to private investors. To effectively attract greater private financing to economic housing and to finance the construction of more social housing by the government, it is proposed that new taxes be imposed to raise ₱170 million in the first year to ₱440 million in the tenth year, as follows:

NEW TAXES	ESTIMATED TAXES IN MILLION PESOS 1970	1980
Employer's payroll tax or levy	₱160.6	₱287.6
Employee's refundable assessment	21.5	38.5
Tax on high-cost dwelling	n.n.	n.n.
Civil registration fee	1.4	1.9
Additional alien registration fee	0.3	0.6
Additional real estate registration fee	n.n.	n.n.
Additional residence tax	3.5	6.0
Special housing development tax (Extended Science Tax)	—	108.1
TOTAL	₱167.3	₱442.7

It must be said that a large low-cost housing program depends critically on the financing element. This means that if Congress is not able to fund it through a financing scheme, the achievements can only be small.

Administrative Machinery

There has been filed in Congress a bill which provides the framework and the basic structure under which an aggressive and rational housing program may be formulated and implemented. The bill proposes the creation of a National Housing Authority (NHA) to undertake massive low-cost housing projects, resettle and rehabilitate squatter families, and assist in urban planning and development.

Under the provisions of the bill, incentives are provided to interest the private sector to invest directly or in partnership with government in housing ventures, so as to diversify risks and enable government to mobilize private investments, conserve its limited resources, and apply efficient business management and experience readily available from the private sector.

Concerning government financing institutions' (SSS GSIS, DBP) investible funds for housing, the Act stipulates 30 per cent for individual loan and 70 per cent for group housing of low-income families through the NHA or through joint ventures with employers subject to the approval of the Authority.

Four constituent administrative machineries to carry out the activities to support the National Housing Authority in implementing the national housing and urban development policy declared under the Act shall be established with corresponding functions as follows:

(1) National Housing Ventures Corporation — to participate in joint ventures or partnerships with the private sector in undertaking low or moderate income housing development.

(2) National Mortgage Investment Bank — to purchase selected types of home mortgages, prin-

cipally those on dwelling built with NHVC participation, and to provide supplementary assistance to a secondary mortgage market.

(3) National Trustee Mortgage Corporation — to provide trust services for home mortgages, so as to insure investor confidence in the secondary mortgage market, and to act as the fiscal agent to service obligations secured by home mortgages.

(5) National Mortgage Insurance and Guaranty Corporation — to establish loan and mortgage insusurance, reinsurance and guaranty programs, so as to encourage more participation of private capital and to establish development standards for insurable projects.

Table 17.1—NATIONAL FOUR-YEAR HOUSING PROGRAM

PROJECTS	1972 HAS. OF LAND	1972 FAMILIES SERVED	1972 NEEDED ₱ M	1973 HAS. OF LAND	1973 FAMILIES SERVED	1973 NEEDED ₱ M.	1974 HAS OF LAND	1974 FAMILIES SERVED	1974 NEEDED ₱ M	1975 HAS OF LAND	1975 FAMILIES SERVED	1975 NEEDED ₱ M	TOTAL HAS OF LAND	TOTAL FAMILIES SERVED	TOTAL NEEDED ₱ M
GOV'T-OWNED HOUSING															
SOCIAL HOUSING															
PHHC Resettlements	204.0	3,038	3,10	250.0	3,750	3.00	400.0	6000	4.00	500.0	7,500	5.00	1354.0	20,288	15.10
PHHC Tondo Tenements	0.5	178	2.80	1.5	534	8.40	1.5	534	8.40	4.0	890	14.00	7.5	2,136	23.60
Sub-Total Soc. Hsg.	204.5	3,216	5.90	251.5	4,284	11.40	401.5	6,534	12.40	504.0	8,390	19.00	1,361.5	22,434	48.70
ECONOMIC HOUSING *															
PHHC Projects	15.0	367	5.30	—	—	—	—	—	—	—	—	—	—	—	—
PHHC/NHC Projects	—	—	—	100.0	2,000	27.00	200.0	4,000	54.00	300.0	6,000	81.00	—	—	—
PHHC/GSIS Projects	48.7	1,218	16.12	84.8	2,067	24.81	200.0	4,000	54.00	250.0	5,000	67.00	—	—	—
GSIS/NWSA Projects	12.0	500	10.00	14.0	614	12.28	—	—	—	—	—	—	—	—	—
GSIS Projects	60.0	900	28.40	80.0	1,100	35.10	74.0	1,710	41.75	100.0	2,000	60.00	—	—	—
SSS Projects	75.0	400	9.00	75.0	400	9.00	75.0	400	9.00	75.0	400	9.00	—	—	—
Sub-Total Eco. Hsg.	210.7	3,385	68.82	353.8	6,181	108.19	549.0	10,110	158.75	725.0	13,400	217.00	1,838.5	33,076	552.76
Total Gov't. Owned	415.2	6,601	74.72	605.3	10,465	119.59	950.5	16,644	171.15	1,229.0	21,790	237.00	3,200.0	55,510	602.46
PRIVATE-OWNED HOUSING *															
GSIS Financed	124.0	4,130	145.48	131.0	4,370	152.81	132.0	4410	154.25	127.0	4,230	148.00	—	—	—
SSS Financed	210.5	7,050	141.00	249.0	8,300	166.00	286.5	9,550	191.00	324.0	10,800	216.00	—	—	—
DBP Financed	40.0	2,000	12.00	44.0	2,200	13.20	480	2,400	14.50	520	2,600	16.00	—	—	—
Sub-Total Pvt. Hsg.	374.5	13,180	298.48	424.0	14,870	332.01	466.5	16,360	359.75	503.0	17,630	380.00	1,768.0	62,040	1,370.20
GRAND TOTAL ..	789.7	19,781	373.20	1,029.3	25,335	451.60	1,417.0	33,004	530.90	1,732.0	39,420	616.00	4,968.0	117,540	1,971.70

* Investment figures include housing components purchased from NHC.

Table 17.2—PHHC FOUR-YEAR HOUSING PROGRAM
(Updated March 1971)

PROJECTS	1972 HAS. OF LAND	1972 FAMILIES SERVED	1972 NEEDED P M	1973 HAS. OF LAND	1973 FAMILIESI SERVED	1973 NEEDED P M	1974 HAS. OF LAND	1974 FAMILIES SERVED	1974 NEEDED P M	1975 HAS. OF LAND	1975 FAMILIES SERVED	1975 NEEDED P M	TOTAL HAS. OF LAND	TOTAL FAMILIES SERVED	TOTAL NEEDED P M
SOCIAL HOUSING															
Carmona Resettlement	104.0	1,538	P1.60	—	—	—	—	—	—	—	—	—	—	—	—
ment	100.0	1,500	1.50	200.0	3,000	P2.00	300.0	4,500	P3.00	400.0	5,000	P4.00	—	—	—
Montalban Resettle-															
Cebu Resettlement ..	—	—	—	50.0	750	1.00	100.0	1,500	1.00	100.0	1500	1.00	—	—	—
Tondo Tenements *	0.5	178	2.80	1.5	534	8.40	1.5	534	8.40	4.0	890	14.00	—	—	—
Sub-Total, Social	204.5	3,216	5.90	251.5	4,284	11.40	401.5	6,534	12.40	504.0	8,390	29.00	1,361.5	22,424	48.70
ECONOMIC HOUSING															
Caloocan	10.0	255	3.30	—	—	—	—	—	—	—	—	—	—	—	—
Ft. Bonifacio AFP*	5.0	112	2.00	—	—	—	—	—	—	—	—	—	—	—	—
N. Avenue Condomi-															
nium Q.C.	2.3	320	4.44	2.2	320	4.40	—	—	—	—	—	—	—	—	—
Iloilo City	1.9	14	0.12	10.0	242	2.07	—	—	—	—	—	—	—	—	—
S. Jose, Bulacan	20.3	390	5.30	20.4	392	5.31	—	—	—	—	—	—	—	—	—
Parañaque	24.2	494	6.26	—	—	—	—	—	—	—	—	—	—	—	—
Naga	—	—	—	31.8	721	7.68	—	—	—	—	—	—	—	—	—
Roxas City	—	—	—	20.4	392	5.31	—	—	—	—	—	—	—	—	—
Tala	—	—	—	100.0	2,000	27.00	200.0	4,000	54.00	200.0	4,000	54.00	—	—	—
Dasmariñas	—	—	—	—	—	—	100.0	2,000	27.00	100.0	2,000	27.00	—	—	—
Cebu *	—	—	—	—	—	—	100.0	2,000	27.00	100.0	2,000	27.00	—	—	—
Iligan *	—	—	—	—	—	—	—	—	—	50.0	1,000	13.50	—	—	—
Alabang *	—	—	—	—	—	—	—	—	—	100.0	2,000	54.00	—	—	—
Sub-Total, Economic	63.7	1,585	21.42	184.8	4,067	51.77	400.0	8,000	108.00	550.0	11,000	175.50	1,198.5	24,652	356.69
GRAND TOTAL	268.2	4,801	P27.32	436.3	8,351	P63.17	801.5	14,534	120.40	1,054.0	19,390	P194.50	2,560.0	47,076	405.39

* Land to be acquired.

Table 17.3—FOUR-YEAR HOUSING PROGRAM FOR GSIS, SSS & DBP

PROJECTS	1972 HAS. OF LAND	1972 FAMILIES SERVED	1972 NEEDED ₱ M	1973 HAS. OF LAND	1973 FAMILIES SERVED	1973 NEEDED ₱ M	1974 HAS. OF LAND	1974 FAMILIES SERVED	1974 NEEDED ₱ M	1975 HAS. OF LAND	1975 FAMILIES SERVED	1975 NEEDED ₱ M	TOTAL HAS. OF LAND	TOTAL FAMILIES SERVED	TOTAL NEEDED ₱ M
GSIS Davao Project ...	20.0	500	8.40	30.0	600	10.10	—	—	—	—	—	—	—	—	—
Fairview, QC	40.0	400	20.00	50.0	500	25.00	—	—	—	—	—	—	—	—	—
Payatas, QC	—	—	—	—	—	—	20.0	450	11.25	—	—	—	—	—	—
Alta, QC	—	—	—	—	—	—	30.0	700	17.50	—	—	—	—	—	—
Bacolod	—	—	—	—	—	—	24.0	560	13.00	—	—	—	—	—	—
Antipolo	—	—	—	—	—	—	—	—	—	50.0	1,000	30.00	—	—	—
Parañaque	—	—	—	—	—	—	—	—	—	50.0	1,000	30.00	—	—	—
Loans to: NWSA ..	12.0	500	10.00	14.0	614	12.28	—	—	—	—	—	—	—	—	—
PHHC	48.7	1,218	16.12	84.8	2,067	24.81	200.0	4,000	54.00	250.0	5,000	67.00	—	—	—
Others	124.0	4,130	145.48	131.0	4,370	152.81	132.0	4,410	154.25	127.0	4,230	148.00	—	—	—
GSIS Sub-Total	(244.7)	6,748	200.00	309.8	8,151	225.00	406.0	10,120	250.00	477.0	11,230	275.00	1,487.5	36,209	950.00
SSS Montalban Project	75.00	400	9.00	75.0	400	9.00	75.0	400	9.00	75.0	400	9.00	—	—	—
Loans	210.5	7,050	141.00	249.0	8,300	166.00	286.5	9,550	191.00	324.0	10,800	216.00	—	—	—
SSS Sub-Total	285.5	7,450	150.00	324.0	8,700	175.00	361.5	9,950	200.00	399.0	11,200	225.00	1,370.0	37,300	750.00
DBP Loans	40.0	2,000	12.00	44.0	2,200	13.20	48.0	2,400	14.50	52.0	2,600	16.00	184.0	9,200	55.70
GRAND TOTAL	570.2	16,198	362.00	677.8	19,051	413.20	815.5	22,470	464.50	928.0	25,030	516.00	2,991.5	82,749	1,755.70

ESTIMATED FOUR-YEAR FINANCING PROGRAM OF NHA

FIGURES ARE IN MILLIONS OF PESOS

	1972		1973		1974		1975		TOTAL
FUNDS AVAILABLE									
Estim. taxes due	—	170.00	—	200.00	—	230.00	—	260.00	860.00
Estim. collection ...	40%	68.00	50%	100.00	60%	138.00	60%	168.00	474.00
Available during year	—	none	—	68.00	—	100.00	—	138.00	306.00
PROPOSED ALLOCATION									
Social Housing 30% [1]	—	none	—	20.40	—	30.00	—	41.40	91.80
Econ. Housing 60% [2]	—	none	—	40.80	—	60.00	—	82.80	183.60
Adm. & free portion 10%	—	none	—	6.80	—	10.00	—	13.80	30.60

[1] & [2] PHHC needs from NHA for social & economic housing are well within proposed NHA allocation.

CHAPTER 18
Health and Nutrition

1. PRESENT SITUATION

The general state of health in the Philippines is considerably improved. Over the years, the major causes of death and disease, particularly in the area of mother and child welfare, have been controlled. However, chronic degenerative cases continue to account for a larger part of mortalities from communicable diseases.

The net general improvement in the health situation was mainly a result of rural health and hospital programs designed to strengthen health services and control the spread of disease. The campaign included health education, nutritional instruction, environmental sanitation and food-drug-and-cosmetic surveillance.

Two separate agencies are directly responsible for the health and nutrition status of the population: the Department of Health and the National Food Nutrition Council.

The private sector has also been shouldering a load of the responsibility. While private hospital capacity in relation to public hospital bed space has consistently been smaller (37.1% average), its share has shown a gradual increase (36.1% in FY 69 to 38.6% in FY 70). In number, there are more private hospitals than public, though their proportion declined from 74.7 per cent in FY 68 to 67.0 per cent in FY 70.

A. Communicable Diseases

Thireen years ago, communicable diseases accounted for 54.7 per cent of all deaths. In a decade, this was reduced to 43.3 per cent. The so-called pestilential diseases, like plague and smallpox, have been totally exterminated; likewise, the occurrence of common acute infectious diseases has also diminished. Yet the seasonal incidence of communicable diseases such as influenza, gastroenteritis, pertussis, typhoid, diphtheria, el tor, etc. remains to be a problem for health officials.

The extent of effective malarial control can be gauged from the operational phase of the anti-malaria campaign which is still in the first of its three stages. The next two phases will be operational within 5 or 8 years. The disease is expected to be wiped out by the end of the campaign.

Meanwhile, tuberculosis continues to cause around 29,000 deaths yearly. This represents 11 per cent of annual health casualties. The extent of the problems includes 1,000,000 active tubercular cases each year.

Campaigns against goiter, poliomyelitis, and schistosomiasis are also being undertaken.

B. Mother and Child Health

Through the years, maternal and child health have continued to receive special attention. A year ago, family planning was formally integrated into the health program, the scope of which was broadened. The efforts have yielded very encouraging results. For example, in 1968, infant mortality declined by 18.1 per cent and maternal deaths, by 2.8 per cent.

C. Nutrition

Malnutrition is prevalent in many urban and rural areas of the country. The findings of a recent nationwide survey reveal, with body weight as the index of nutrition, that a high percentage of the population of age six or younger are suffering from varying degrees of malnutrition as indicated below:

1. 45 per cent from **first degree** malnutrition (10-24 per cent below standard weight)
2. 30 per cent from **second degree** malnutrition (25-39 per cent below standard weight)

The incidence of malnutrition has also rated high among pregnant and lactating mothers. For all other groups, food intake has simply been below recommended levels. Recorded vitamin and mineral deficiencies are symptomatic manifestations of such diet inadequacies.

A wide gap between nutritive research and its application to the Filipino home and community exists. Programs to narrow this gap are to be undertaken.

D. Dental Care

At present, there are only 322 active rural health dentists in the whole country; they perform not only direct dental services but also carry out studies in rural

dental practice. Many areas are not yet provided with such service.

E. Facilities

The Hospital Development Program of 1966 has completed a total of 32 emergency and provincial hospitals. Hospital beds have increased from 18,275 to 19,725 in the last four years. On the other hand, hospital personnel suffered a decrease of 5 per cent (from 13,311 to 12,677) during the same period. The lay-off of casuals, as well as the exodus abroad of physicians and nurses, has left many positions vacant, especially in emergency hospitals.

Some general hospitals still suffer from extreme congestion even as beds have increased in number. This problem has been traced to, among other things, overstaying patients who could just as well avail of needed marginal treatment in secondary clinics. Even in emergency wards, bed space is seldom available to new and more needy patients. Oftentimes inmates have had to bring their own sleeping cots.

Objectives and Targets

The current health program is concerned with the following: environmental sanitation, extensive mother and child care, rehabilitation of nutrition, expansion of rural health services, maintenance of the health personnel/population ratio as stipulated by law, improvement in hospital facilities, better delivery of health care, control of communicable diseases, expansion of rural health dental services (with a target of one dentist per municipality), and respectable production standards in foods, drugs and cosmetics.

2. THE FOUR-YEAR HEALTH PROGRAM

Necessarily, the health program is tied up with the sectoral programs in community development, social welfare, family planning, and education. In brief, its implementation includes the activities listed below.

1. **Sanitational improvement.** This program consists of the enforcement of food hygiene regulations, the campaign for proper toilet and other sanitary practices, and the identification of problems in environmental pollution affecting plants, animals, and man.

2. **Family planning.** Health clinics and hospitals are intimately tied to programs of population planning, and the breadth of such activities is better spelled out in the program on family planning.

3. **Extension of health services.**

4. **Health infrastructure** (government hospitals). This program is spelled out in Table 18.1, which shows the summary of projects by priority for each of the four years.

Rank ordering is indicated by the project category number. The higher this number, the lower the ranking.

The establishment of new provincial hospitals is given utmost priority on the basis of each province's right to one such hospital (under present laws) catering to the medical needs of the constituent population. In these establishments, definitive care in four basic services (medicine, surgery, obstetrics and gynecology, and pediatrics) will be provided. Auxiliary services in X-ray laboratory and anesthesia complete the setup. Nine such hospitals for nine newly-created provinces are expected to be erected by FY 1975. The four-year aggregate financial requirement will amount to ₱7.35 million.

Unfinished construction comes next on the list because buildings tend to deteriorate faster when exposed to the natural elements for long stretches of time. This unnecessary depreciation wastes sunk resources of the taxpayer and at the same time denies him early access to hospital service. Twenty-three such establishments are up for completion in the next four years. This will incur ₱13.5 million of additional construction work.

Make-shift emergency hospitals, improvised from old residential houses and puericulture centers, oftentimes prove unsuitable to house medical facilities and inadequate to handle large volumes of desired services. The rehousing of 14 such establishments is ranked number three in the priorities. About ₱3.73 million will be used for this purpose.

New hospitals authorized under different Enabling Acts are ranked fourth in priority. These are the hospitals erected in rural localities of considerable distance from the nearest existing hospital. Of late, they have aroused increasing attention after statistics revealed that 60 per cent of annual casualties involved cases which have never been subjected to medical attention of any kind. Construction of seven such hospitals will be accomplished within the program period and will draw an aggregate sum of ₱1.3 million from government coffers.

Occupying the fifth slot is the alleviation of the hospital congestion problem. An offshoot partially of public indignation, and partially of humble recognition of space and service short-comings, expansions and improvements in 15 hospitals are being seriously con-

templated, and these will entail ₱15.6 million of the four-year budget.

Finally, a moderate improvement in the facilities in strategic medical centers and hospitals will be undertaken in order to approximate modern international standards. Many of our emergency and provincial hospitals have inadequate and outmoded facilities. This "face-lifting", which is designed to upgrade the quality of service and care, will involve only 11 key establishments in the different parts of the country and a four-year total expenditure of ₱15.1 million.

In four years, the government hopes to add 39,358 square meters of hospital and sanitaria space to existing capacity. Broken down annually, floor space expansion will proceed with successive annual increments of 6,471 sq. m., 10,715 sq. m., 13,172 sq. m., and 9,000 sq. m., between FY 72 and FY 75.

To realize the hospital targets for the period, domestic resources totalling some ₱57 million will be needed. Staggered over the annual physical targets, corresponding requirements will amount to ₱12 million for FY 72, ₱14 million for FY 73, ₱13 million for FY 74 and 12 million for FY 75.

5. **Medical Assistance Program** (M.A.P.). A trial implementation will check the system for efficiency in delivering health care to the greater number of people. The voluntary, concerted, cooperative, and collaborative efforts between the community and the medical profession will be harnessed. The overall workability will depend on how earnestly private medical sectors with material and physical support from government agree to service the poor. The community is to help in providing the necessary logistics. Selected as pilot test areas are Nueva Ecija, Cebu, and Davao del Sur. The M.A.P. was scheduled for implementation last July 1, 1971.

6. **Immunization against communicable diseases.** BCG immunization against tuberculosis will be done by enlarging rural health units with additional static and mobil X-ray clinics and microscopy services, and by providing adequate treatment for diagnosed cases of the ambulatory and domicillary types.

Malaria operations, as mentioned, will move from the attack to the consolidation phase in two or three years, and will shift to surveillance operations. Within 5 to 8 years, it is anticipated that malaria will have been successfully eradicated.

Finally, the campaigns against goiter, poliomyelitis and schistosomiasis will be continuously waged.

7. **Dental health services.** These services will be improved through the training of more dentists.

8. **Food, drug, and cosmetic, industries.** An intensive training and development program to upgrade the scientific knowledge and technical capabilities in relation to regulatory functions involving the food, drug, and cosmetic, industries will be undertaken.

3. THE FOUR-YEAR NUTRITION PROGRAM

Like all the other social programs, the nutrition program will affect community development, education, family planning, and social welfare. This program is, of course, also closely tied up with the food production program spelled out in the agriculture section. Greater food production is the best input to improvement of nutritional standards.

A. Applied Nutrition Program

1) Training of different employes in eight national training institutes under cooperative arrangements of departmennts having to do with teacher training, education, health, and food production, will be undertaken.

2) Orientation courses for various national and regional administrators of nutrition programs will likewise be given.

B. Nutrition Education and Information

In cooperation with other government agencies, nutrition education and dissemination of information are to be carried out in schools and in communities.

Nutrition education is carried out in school curricula. This is emphasized especially as part of the public school curricula.

The Four-Year National Nutrition Program extends from the Pilot Applied Nutrition Program which originally started in Bayambang, Pangasinan in 1964. To date, this project has included 385 schools in 14 provinces and 9 cities. In the future, the National Nutrition Program hopes to cover the remaining 52 provinces. The following are the targets for fiscal years 1972, 1973, and 1974:

FY 1972

Provinces expected to be reached are: Isabela, Pangasinan, Nueva Ecija, Batangas, Camarines Sur, Cebu, Iloilo, Cotabato, South Cotabato, and Davao del Norte. An additional 40 schools and 65 barrios are expected to benefit from the year's program.

FY 1973

Provinces expected to be reached are: Nueva Viscaya, Ilocos Norte, Zambales, Laguna, Albay, Negros Occidental, Bukidnon, Misamis Oriental, and Zamboanga del Norte. An additional of 60 schools and 140 barrios are expected to be benefited.

FY 1974

Provinces expected to be reached are: La Union, Cagayan, Benguet, Pampanga, Cavite, Rizal, Camarines Norte, Negros Oriental, Capiz, and Zamboanga del Norte, with 75 schools and 155 barrios as beneficiaries.

C. Supplementary Feeding

Several agencies, particularly the Bureau of Public Schools, undertake supplemental feeding activities. About 104,720 children in 260 schools have participated in this feeding program. Simultaneously, the community centers of the Agricultural Productivity Commission and the PACD provide supplemental meals. Private, religious and civic groups, together with public agencies, assist in this activity.

4. RESOURCES

Philippine Government contribution to the nutrition program is channeled through different agencies, the bulk of which is made through the NFAC.

The program is assisted also by major foreign agencies. The UNICEF and other UN agencies like the WHO and the FAO continue to provide various forms of assistance.

Table 18.1—ANNUAL INVESTMENT REQUIREMENTS ON CONSTRUCTION OF HOSPITALS, FY 1972-75
(In million pesos)

PROJECT CATEGORY	ESTIMATED COST OF PROJECT [1]	FY 1972	FY 1973	FY 1974	FY 1975
1. Newly Created Province with proposed Hospitals	22.5	4.4	4.2	3.4	3.1
2. Emergency Hospitals and other Hospitals with Building Construction Incomplete	21.6	3.1	2.4	1.8	.9
3. Emergency Hospitals Operating in a Temporary Building	9.1	1.6	1.8	1.3	.7
4. Emergency Hospitals Authorized for Construction	4.6	.3	1.0	1.1	.9
5. Improvement and Construction of Existing Hospitals	31.2	1.9	3.7	3.5	3.5
6. Medical Centers, Training, Teaching and Other National Hospitals	19.2	—	.8	1.4	1.8
GRAND TOTAL	108.2	11.3	13.9	12.5	10.9

[1] Includes the balance of authorized appropriation for each project in P.W. Acts, FY 1971.

CHAPTER 19
Cooperatives

A cooperative is one institution in the economic-social amelioration of people particularly those with limited means and opportunities. Cooperation attends to both the economic upliftment and development of the social virtues of individuals which are essential in the drive for increased resources productivity and equity of the national development plans.

In the Philippines, cooperatives have long formed a part of national development policy. But it was only fairly recently that programs of promoting cooperatives received major support in terms of activity priorities of the government. The philosophy behind this movement, as conceived at present, is that through this organization the potentials for economic growth and stability of the country would be further strengthened.

Cooperative movement was introduced here more than fifty years ago. Though characterized by rapid growth and expansion in the past, the movement is still at a level far from what is required. The need to accelerate the pace of this movement becomes more glaring, considering the present and immediate outlook for needed reforms in development programs and policies that are impelled by the clamor for drastic economic and social changes.

Two distinct major groups that may be defined to include all cooperative organizations existing in the country are the (1) agricultural cooperatives and (2) non-agricultural cooperatives. Rural Electrification Cooperatives, although a part of the non-agricultural cooperatives, are being considered as a third major group to reflect the major emphasis devoted to providing electricity to rural areas in all parts of the country.

1. GOAL AND STRATEGY

In broad terms, the primary goal of the cooperative program is to assist the people to undertake economic and social activities on a cooperative basis in order to improve the national economic productivity and to promote the level of general welfare to a point which will sustain, if not enhance, the growth of development of the national economy. As a result of cooperative efforts, among others, a more equitable distribution of income is expected; the economic independence of producers and consumers will be strengthened; marketing margins will be reduced; fair and more stable prices for producers' and consumers' goods will be assured; and more effective utilization of resources for great profit will be attained.

In the general policy of the government to encourage the promotion and development of cooperatives to achieve these goals, some of the basis strategies that will be considered are the following:

1. Establishment of pilot cooperatives in strategic places to serve as show windows for others to emulate;
2. Establishment of cooperatives to be limited only to organizations with the possible highest likelihood for early success;
3. Organization of cooperatives with greater backward and forward linkages with other economic activities;
4. Closer coordination of activities of the government in order to provide direction to government and private agencies engaged in cooperatives promotion, development and supervision; and
5. Depend more on the voluntary movement of the private sector, with the government providing basic guidelines and support in the promotion, organization, and administration of the cooperatives.

2. AGRICULTURAL COOPERATIVES: TARGET AND PROGRAM

The organization of agricultural cooperatives in this country probably started as far back as 1927 or even earlier. Its intensified development, however, began in 1952 when the Agricultural Credit and Cooperative Financing Administration (ACCFA) created under Republic Act No. 821 started the promotion, organization, and supervision of the Farmers Cooperative Marketing Associaiton (FaCoMas). Under Republic Act No. 3844, which is the Agricultural Land Reform Code Act, the ACCFA was changed into the Agricultural Credit Administration (ACA). Under this law, the activities of the ACA were limited to the extension of agricultural credit and the supervision of marketing cooperatives. The Agricultural Productivity Commission (APC) is primarily charged with the promotion and organization of agricultural cooperatives.

The FaCoMas constitute the primary marketing channel in the cooperative system. They are farmer-owned and controlled, and are organized on the municipal level and financed through stock subscriptions. A marketing agreement, under which a farmer pledges to deliver or deposit his produce for marketing purposes with his association, is a requisite to membership.

The regional federations make up the main secondary level of cooperative marketing. The regional federations have for their members the local cooperative associations.

On the national level, the Grains Marketing Cooperative of the Philippines (GRAMACOP) is the national marketing center of the local and secondary cooperatives for grains. It has the regional federations and the FaCoMas as members. Its present main market outlets are Manila and its suburbs and other deficiency areas.

Since 1952, a total of 668 FaCoMas have been organized and affiliated with the ACA (See Table 19.1). Of this number, 379 are palay cooperatives, of which only 170 were actively operating as of June 30, 1970. Of this total, 165 are local or primary societies, four are regional federations, and two are national or central societies. The membership of these different FaCoMas numbered 77,000 active farmers.

For the next four years, the major concentration of effort is on the organization of palay/rice cooperative associations, but the promotion and organization of all kinds of agricultural cooperatives, specialized and multi-purpose, will also be pushed through. The specific target is to organize new cooperatives or to revitalize old inactive organizations to provide 27 additional associations each year to the expected 165 active cooperatives existing in the initial year of the Plan (see Table 19.2). That is, by the end of the four-year period, there will be 273 operating units which are anticipated to approach the point of stabilization of the palay/rce cooperatives.

In the organizations of these cooperatives, the integral elements that will be encouraged for further development are the following:

A. Diversifying/Expanding Cooperative Activities/Services

1) Procurement and distribution of farm supplies and materials (including consumer goods);
2) Specialization by crop, services, functions;
3) Assumption by the cooperatives of responsibility of providing management and extension service to members;
4) Establishment of cooperative-owned and managed seed/breeding farms to service the needs of members;
5) Crop diversification; and
6) Development of home industries

B. Cooperative Training and Management Guidance

1) Establishment by the cooperatives of their own centralized training programs or institutes; and
2) Setting up of cooperative audit and management services for members of the system on a centralized basis.

C. Organizational Integration

1) Within individual cooperatives, development of units to improve cohesiveness of membership and functional efficiency — i.e., study groups, neighborhood circles, councils, etc.;
2) Between and among cooperative associations, organization of federations, joint projects/services, central or national organs — i.e., leagues, federations, etc.;
3) Cooperative banks, cooperative insurance, etc.; and
4) Linkages with non-agricultural sectors of movement — i.e., cooperative unions and the like.

The specific activities to be undertaken include the identification, selection and duplication of cooperative models in strategic locations; continuous and systematic training and guidance of cooperative officials, leaders and the farmer-members in general, as well as of government personnel engaged in cooperative organization and supervision; evaluation of cooperatives for the purpose of extension of loans, guidance and supervision; and management pools to set sound management policies, business plans and strategies and training of managers in the decision-making process.

3. NON-AGRICULTURAL COOPERATIVES: TARGET AND PROGRAM

Non-agricultural cooperatives are presently governed by the provisions of R.A. 2023. Under this law, the Cooperatives Administration Office (CAO) administers and supervises the operations of all non-agricultural cooperatives. These include the following:

1. Credit unions — to foster thrift among the members as well as to serve them in times of emergencies;
2. Consumers' cooperatives — to enable members to acquire goods on a retail basis at reasonable prices;

Table 19.1—TYPES, NUMBER AND OPERATIONAL STATUS OF FACOMAS

CROPS/SERVICES HANDLED	OPERATIONAL STATUS AS OF JUNE 30, 1970 TOTAL	ACTIVE	DORMANT	AS OF JUNE 30, 1969 TOTAL	ACTIVE	DORMANT
LOCAL FACOMAS						
Palay	360	165	195	358	149	209
Tobacco	132	53	79	131	67	64
Copra	50	6	44	50	4	46
Poultry & Livestock	28	17	11	24	17	7
Sugar	26	21	5	23	19	4
Fiber	3	1	2	2	—	2
Fruits & Vegetables	9	4	5	8	4	4
Fish	9	3	6	6	1	5
Onion & Garlic	2	1	1	1	—	1
Coffee & Peanuts	4	1	3	3		3
Processing	2	—	2	3	3	—
Irrigation	3	3	—	3	3	—
TOTALS	628	275	353	609	264	354 [1]
CENTRALIZED TYPE						
Poultry & Livestock	5	3	2	5	2	3
Sugar	4	3	1	5	5	—
Fish	2	2	—	3	2	1
Coffee & Peanuts	1	1	—	2	1	1
Onion & Garlic	1	1	—	1	1	—
Supply	1	1	—	1	1	—
Fiber	—	—	—	1	1	—
Processing	—	—	—	2	—	2
TOTALS	14	11	3	20	13	7 [2]
FEDERATIONS (*Including CCE & GRAMACOP*)						
Palay	19	5	14	18	4	14
Tobacco	5	1	4	4	—	4
Fruits & Vegetables	1	1	—	1	—	1
Supply	1	1	—	—	—	—
TOTALS	26	8	18	23	4	19
GRAND TOTALS	668	294	374	652	281	371 [3]

[1] 36 Semi-Active
[2] 2 Semi-Active
[3] 38 Semi-Active

Table 19.2—FOUR-YEAR AGRICULTURAL COOPERATIVE DEVELOPMENT PROGRAM

	FY 1972	FY 1973	FY 1974	FY 1975
1. *No. of FACOMAS*	192	219	246	273
a. Active, beginning of FY	165	192	219	246
b. New/Reactivated	27	27	27	27
2. *Membership* (Number in Thousand)	101	129	156	188
a. At beginning of Fiscal Year	77	101	129	157
b. New members of old coops	16	20	19	23
c. Members of new coops	8	8	8	8
3. *Area Cultivated* (In Thousand Hectares)	303	388	470	565
a. At beginning of Fiscal Year	232	303	388	470
b. New acreage of old coops	47	61	58	71
c. Acreage of new coops	24	24	24	24
4. *Total Expected Production* (In Thousand Cavans of 44 kgms. of palay),[a]				
Old and new coops	12,100	17,500	23,500	31,200
5. *Palay Entering Marketing*[b] *Channel* (In Thousand Cavans of 44 Kgms.)	6,700	9,600	12,900	17,200
6. *Expected Volume of coop business*[c] (In Thousand Cavans of 44 kgms.)	3,400	5,800	9,200	13,100
7. *Capitalization of coops* (In Thousand Pesos)	₱6,135.00	₱8,870.00	₱13,205.00	₱19,240.00
a. At beginning of Fiscal Year	₱4,500.00	₱6,135.00	₱ 8,870.00	₱13,205.00
b. Capital build-up of old coops	1,500.00	2,600.00	4,200.00	5,900.00
c. Capital, new coops	135.00	135.00	135.00	135.00

[a] Estimated at 40 cavans per hectare during the first year with an annual increase of 5 cavans per hectare.
[b] Estimated at 55% of total palay production.
[c] Estimated at 5% of total coop trade during the first year and at 8%, 13% and 16% for subsequent years.

Source of basic data: Agricultural Credit Administration

3. Industrial cooperatives — to organize small producers and workers into larger units, thereby facilitating economics of scale; and

4. Service cooperatives — to enable special types of services to become responsive to the needs of the community.

In 1970, of the total 4,664 registered non-agricultural cooperatives, only 2,095 or about 45 per cent were active. In fact, during the last five years, less than fifty per cent of the aggregate registered cooperatives were in operation. The total membership declined by about 20 per cent from about 180 thousand in 1966. However, the registered non-agricultural cooperatives increased by 26 per cent during the period. The notable expansion was in the number of credit unions and service type of cooperatives registered.

The immediate objective of the non-agricultural cooperative program is to organize consumer cooperatives in all the municipalities and cities of the country. This is now being implemented and programmed to be completed within the Plan period. The rest of the indicated programs for the next four years is summarized below:

A. **Organization of primary cooperatives:**

1) Establishment of a credit union in every barrio;

2) Establishment of producers cooperatives in every city and municipality; and

3) Establishment of multi-purpose cooperatives (agrindustry cooperatives that integrate all services for the production, storage, processing, marketing, distribution and credit) in suitable areas on a pilot project basis.

NUMBER OF REGISTERED NON-AGRICULTURAL COOPERATIVES

TYPES OF NON-AGRICULTURAL COOPERATIVES	DECEMBER 1966	DECEMBER 1970
Credit Unions	1,683	2,432
Consumers cooperatives	1,884	2,047
Industrial cooperatives	76	87
Service & other cooperatives	73	98
TOTAL	3,716	4,664

B. **Organization of federations/secondary cooperatives:**

1) Organization of provincial cooperative wholesale societies;

2) Organization of Provincial Federations of Credit Unions to provide services such as training of treasurers, directors, and other members of the cooperatives, as well as to assist in the organization of barrio credit unions;

3) Organization of Provincial Cooperative Banks to finance activities of cooperatives in every province of the country;

4) Revitalization of the Philippine National Cooperative Bank to provide more funds to finance the operation of cooperatives;

5) Organization of Regional Cooperative Training Centers; and

6) Organization of a National Cooperative Insurance Service to take care of the insurance needs of cooperatives in all sectors.

4. RURAL ELECTRIFICATION COOPERATIVES: TARGET AND PROGRAM

Under R.A. 6038, the National Electrification Administration Act, a rural electrification cooperatives movement which is entirely a new area of service cooperatives, will be enforced as part of the total electrification program for the whole country.

The Rural Electrification Cooperatives program is designed to complete the establishment of the backbone power systems throughout the country. The specific aim is to establish an electric cooperative system in each province within the Plan period. These cooperatives will be an integrated system anticipated to provide electric services for 5-10 municipalities (or an average coverage of approximately 200,000 people per system).

Under this program, the National Electrification Administration (NEA) is primarily a lending institution which will give loans at low interest rate to public service entities, with preference to cooperatives engaged in the construction of electric generation, transmission and distribution facilities for the purpose of supplying area coverage services. The NEA is provided by law with a revolving fund, estimated at about ₱300 million within ten years for lending purposes.

The activities for the first year of the program may be broken down into the following major groupings:

1. **Administrative.** This activity is geared to make the NEA capable of providing the necessary administrative support for the vastly expanded operations envisioned in the overall program. This will include the reorganization of NEA and staff development including training of some 320 cooperatives field technicians who will be sent out to establish the electric cooperative systems in each of the provinces of the country.

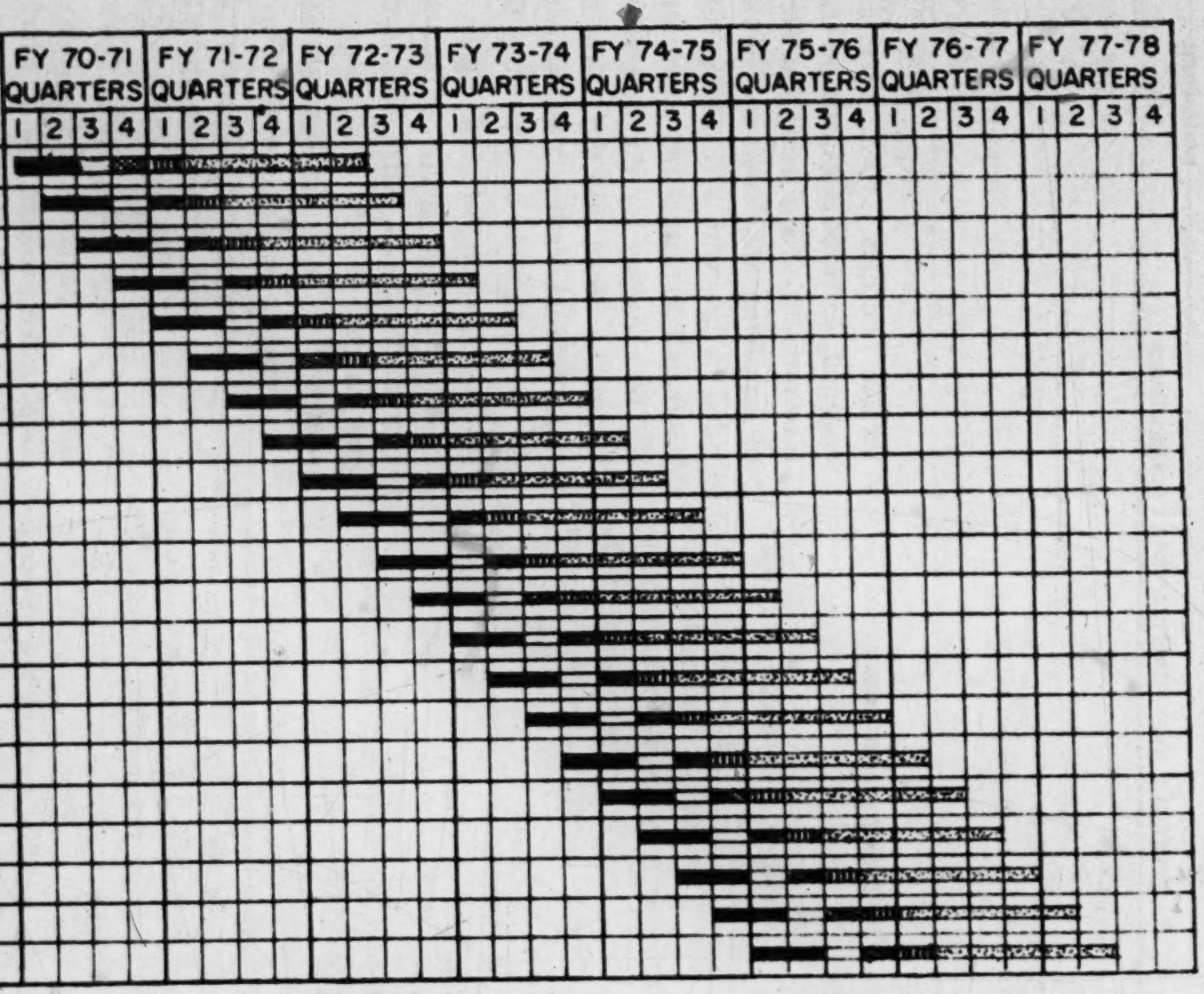
2. **Operational:** (a) The completion of 60 on-going electric systems (to include the VRESCO and MORESCO pilot projects); (b) Construction of one new project (Talim Electric Cooperative System) in Rizal province; and (c) Preparation of feasibility studies for 33 other cooperative projects, 24 of which are scheduled to be completed within the first year of the program.

Starting from FY 1972 to FY 1975, the construction of about 104 projects is scheduled to be completed. The specific developmental activities to be done during the next four years include the undertaking of feasibility studies, formation of cooperatives, financing, architecture and engineering designs, bidding and sward, and construction (see Figure 19.1). The immediate target is the completion and implementation of 40 cooperative projects in each year starting from the second quarter of FY 1973 to the second quarter of FY 1978. By the end of FY 1978, the entire program consisting of 204 projects is expected to be fully operational. The expanded activities will also include the establishment of power generator and transmission (G & T) cooperatives. These cooperatives will set up the thermal plants that will make possible the integration of individual cooperatives within a given area. The funding requirements for the eight-year rural

Figure 19.1

SCHEDULE OF DEVELOPMENT OF ELECTRIC COOPERATIVE PROJECT, EIGHT-YEAR PROGRAM FY 1970-71 THRU 1977-78

PROJECTS	POPULATION (X 1000)	ESTIMATED COST (PM)
1. PROJECTS 1 TO 4	500	85
2. PROJECTS 5 TO 14	1,780	119
3. PROJECTS 15 TO 24	1,770	123
4. PROJECTS 25 TO 34	1,340	117
5. PROJECTS 35 TO 44	1,950	135
6. PROJECTS 45 TO 54	1,100	82
7. PROJECTS 55 TO 64	1,270	86
8. PROJECTS 65 TO 74	1,560	117
9. PROJECTS 75 TO 84	1,720	130
10. PROJECTS 85 TO 94	1,100	83
11. PROJECTS 95 TO 104	1,130	84
12. PROJECTS 105 TO 114	1,540	115
13. PROJECTS 115 TO 124	1,690	127
14. PROJECTS 125 TO 134	1,110	83
15. PROJECTS 135 TO 144	1,080	81
16. PROJECTS 145 TO 154	1,440	108
17. PROJECTS 155 TO 164	1,750	131
18. PROJECTS 165 TO 174	1,010	76
19. PROJECTS 175 TO 184	1,130	85
20. PROJECTS 184 TO 194	1,400	117
21. PROJECTS 195 TO 204	1,720	129
TOTAL	29,090	2213



LEGEND:

- FEASIBILITY STUDY & COOPERATIVE FORMATION
- FINANCING
- ARCHITECTURE & ENGINEERING
- BIDDING & AWARD
- CONSTRUCTION

electrification cooperative program are estimated at P2.2 billion. (The annual breakdown of these by activities is indicated in Table 19.3.)

5. INTEGRATED COOPERATIVE DEVELOPMENT PROGRAM

It is interesting to note that at present there are about 30 cooperative laws and Executive and Administrative Orders to stimulate the promotion of the cooperative movement. The implementation of the laws and orders are being executed by at least 20 agencies of the government.

To effect economy and efficiency in the performance of these agencies, it is highly desirable to have an integrated program of activities. To this end, the initial steps taken was the creation of a Cooperative Coordinating Council by Presidential Executive Order. Its programs of action are geared toward the following: (1) development of consumers cooperatives, (2) relating the activities of consumers cooperatives with producers and other related cooperative entities; and (3) the conducting of educational and training programs. For the effective implementation of these activities, four major agencies (Cooperatives Administration Office, Presidential Assistant on Community Development, Agricultural Productivity Commission and the Agricultural Credit Administration) engaged in cooperative movement are coordinating their activities. The Regional Cooperative Development Committee and the Provincial Cooperative Development Committee implement the cooperative programs in the regional and provincial levels, respectively.

The coordination and interaction among various types of cooperatives will strengthen the whole movement. At present, the ultimate objective of these beginning efforts to interrelate the activities of all cooperatives is being held in promise by two bills on cooperatives pending in Congress that will effect an integrated national cooperative development program.

The first important measure on cooperatives is S. No. 434 or H.B. No. 3501, otherwise known as "The Philippine Law on Cooperatives". This Bill seeks to establish a Cooperative Development Authority as a policymaking body on cooperative affairs which shall participate in all social and economic planning of the country. The basic reason for the creation of this Authority lies in the desire to actively assist the people to develop their enterprises the cooperative way to strengthen their economic independence, and this is the rationale for the consolidation of the functions and activities of agencies involved in the promotion and development of cooperatives in the Cooperative Development Authority.

The Authority will have under its supervision and control a number of offices including the following: (1) Commission on Cooperatives which will absorb the powers, functions, and resources of all offices engaged in cooperative activities, with the Cooperative Administrative Office as the nucleus; (2) The Agricultural Credit Administration (ACA) which will also be under the supervision of the Authority will be reorganized into a Cooperative Financing Commission with the main function of extending loans to finance the existing and new agricultural cooperatives; (3) The Agricultural Credit and Cooperative Institute (ACCI) will be converted into a Cooperative College under the University of the Philippines to professionalize cooperative education in the country; (4) A National Cooperative Education and Research Center as part of the Cooperative College will be created to provide specialized training and research in all types of cooperatives; (5) The Department of Education shall find ways and means to integrate various aspects of cooperatives into the curricula of both public and private schools, particularly in primary and secondary schools in land reform areas and settlement areas; (6) A "Laboratory Cooperatives" shall be established in every educational institution in the country under the supervision of the Commission of Cooperatives to demonstrate the practical workings of cooperative enterprises; (7) A cooperatives Insurance System to strengthen the financial position of all cooperatives will be created; and (8) The Central Cooperative Educational Foundation to serve the whole cooperative movement.

The organization of these cooperatives under the proposed setup is designed to execute effectively the consolidated functions of the existing agencies sought to be reorganized or abolished in the proposal.

The second bill is H.B. No. 881 which seeks to hasten agrarian reform through the medium of multi-purpose cooperatives. Under this proposal, all agricultural lands acquired by the government through purchase, expropriation and other means under the Land Reform Code shall be sold or leased to multi-purpose cooperatives or their members only. Individuals may be given lands through sale or lease provided that they agree to jointly or communally cultivate or work on such lands on a cooperative basis by being members of a cooperative.

It has been observed that only a portion of the farm population benefits under the present setup of fragmenting and distributing lands without complementary measures for their consolidation. Moreover, non-

Table 19.3—SCHEDULE OF EXPENDITURES
EIGHT-YEAR RURAL ELECTRIFICATION COOPERATIVE
PROGRAM FY 70/71 THRU FY 77/78

(In million pesos)

PROJECTS	POPULATION (X 1000)	ESTIMATED COST	FY 70/71	FY 71/72	FY 72/73	FY 73/74	FY 74/75	FY 75/76	FY 76/77	FY 77/78
1. Freight, Storage & Handling of Reparations Equipment		7	7	—	—	—	—	—	—	—
2. Completion of 60 on-going Projects	250	4	4	—	—	—	—	—	—	—
3. Projects 1 to 4	500	85	11	42	32	—	—	—	—	—
4. Projects 5 to 14	1,780	119	—	48	71	—	—	—	—	—
5. Projects 15 to 24	1,770	123	—	25	98	—	—	—	—	—
6. Projects 25 to 34	1,340	117	—	12	82	23	—	—	—	—
7. Projects 35 to 44	1,950	135	—	14	67	54	—	—	—	—
8. Projects 45 to 54	1,100	82	—	—	33	49	—	—	—	—
9. Projects 55 to 64	1,270	86	—	—	17	69	—	—	—	—
10. Projects 65 to 74	1,560	119	—	—	—	—	—	—	—	—
11. Projects 75 to 84	1,720	130	—	—	11	66	53	—	—	—
12. Projects 85 to 94	1,100	83	—	—	—	32	51	—	—	—
13. Projects 95 to 104	1,130	84	—	—	—	19	65	—	—	—
14. Projects 105 to 114	1,540	115	—	—	—	13	80	22	—	—
15. Projects 115 to 124	1,690	127	—	—	—	11	66	50	—	—
16. Projects 125 to 134	1,110	83	—	—	—	—	31	52	—	—
17. Projects 135 to 144	1,080	81	—	—	—	—	21	60	—	—
18. Projects 145 to 154	1,440	108	—	—	—	—	14	70	24	—
19. Projects 155 to 164	1,750	131	—	—	—	—	11	67	53	—
20. Projects 165 to 174	1,010	76	—	—	—	—	—	30	46	—
21. Projects 175 to 184	1,130	85	—	—	—	—	—	17	68	—
22. Projects 185 to 194	1,400	117	—	—	—	—	—	12	81	24
23. Projects 195 to 204	1,720	129	—	—	—	—	—	11	66	52
TOTAL	29,340	2,224	22	141	423	417	416	391	338	76

agricultural rural workers do not stand to benefit from the distribution of lands under the Land Reform Code. Unless these workers, together with the increasing excess labor supply in the rural areas, are quickly absorbed by industry, they will eventually pose great social problems especially so when they stand to lose their means of livelihood or job opportunities by reason of the breaking up of landholdings.

All economic activities within the areas of operation of the cooperative will therefore be planned, directed and implemented by these cooperatives. Government financial assistance, technical guidance, facilities and other services will be channeled accordingly through these multi-purpose activities. It is expected that this arrangement may effect to some extent the equity in income distribution among the population in the areas, since the earnings and savings of these multi-purpose cooperatives owned and managed by the members will be equitably distributed to them.

CHAPTER 20

Social Welfare and Community Development Programs

The programs for social welfare and for community development administered by the Department of Social Welfare and the Presidential Arm for Community Development (PACD), respectively, are intended for backward communities and the handicapped members of society. The handicap may be the result of physiological or environmental factors.

The programs of the two agencies intertwine with those of the other social institutions. It is felt that a coordinated and unified approach to planning and program implementation will enhance a balanced socio-economic development. The programs of the two agencies will be separately described.

1. THE FOUR-YEAR SOCIAL WELFARE PROGRAM

The coverage of this program will include (1) 57 per cent of the population who live either within subsistence conditions or are in danger of falling below subsistence level in the event of a crisis, (2) problem children and out-of-school youth, and (3) individuals due for rehabilitation.

The objectives for the next four years will be: (1) to improve and adjust the social conditions of disadvantaged families, (2) to mold out-of-school youth and juvenile delinquents into responsible citizens, and (3) to start pre-school children with the proper training.

As a point of reference, accomplishments in FY 1971 are summarized in Table 20.1, together with the four-year program targets.

The present strategy is to concentrate limited resources to activities with the greatest impact on millions of distressed families. A policy of active partnership with local governments, non-governmental agencies, and international organizations engaged in welfare and related services has been adopted.

For the next four years, the following sub-programs will receive main emphasis:

A. Integrated Community Welfare Program

1) Grass-roots Council Organization Services

This program aims to capitalize on community action groups and to develop these into a strong power base for progress and advancement in the community.

Implementation will engage a two-pronged approach. On one hand, it will operate at the grass-roots level, bringing together other organizations and individuals to collaborate, coordinate and jointly plan with the base organization programs for social adjustment and rehabilitation. On the other hand, the use of Community Centers as operation headquarters will be intensified. The Centers serve as delivery points of welfare services to community residents.

2) Family Planning Services and Population Education

First and foremost, this program aims to promote responsible parenthood. It includes proper education concerning family life, fertility control, marital and premarital counselling, and motivational instructions for family planning.

3) Social Development of Out-of-School Youth and Pre-School Children

This is a comprehensive program designed to provide the youth with opportunities for physical, social and emotional development through creative group experience. This should prepare them for a more active and fuller participation in community life. It will be undertaken by organizing youth groups, seminars in citizenship and leadership training, and culture-recreational activities. With UNICEF assistance, pre-school services will be further expanded.

4) Comprehensive Socio-Economic Advancement Program

In conjunction with the program of other agencies, this program is designed to ameliorate the economic plight of families and individuals living in depressed areas of the country. Services will include self-help activities which generate income for unemployed heads-of-families, disabled youth, recovering drug addicts, negative Hansenites, released prisoners and other individuals with special needs. Other non-governmental and governmental agencies will similarly be involved in complementary services.

Table 20.1—SOCIAL WELFARE PERFORMANCE FOR FY 1970-71 AND FOUR YEAR PROGRAM TARGETS

SERVICES	FY 1970-71 NO. OF CASES SERVED	FY 1970-71 TARGET NO. OF CASES	TARGET NUMBER OF CASES TO BE SERVED FY 1971-72	FY 1972-73	FY 1973-74	FY 1974-75
I. Integrated Community Welfare Program						
1. Grassroots—Council Organization Services	44,079	30,000	88,000	132,000	176,000	220,000
2. Family Planning Services and Population Education	—	—	(174,000 [1]	(350,000 [1]	(520,000 [1]	(690,000 [1]
	—	—	(50,000 [2]	(100,000 [2]	(150,000 [2]	(200,000 [2]
3. Social Development of Out-of-School Youth and Pre-school Children	15,726	8,060	30,000	45,000	60,000	75,000
4. Comprehensive Socio-economic Advancement Program (Self-help Opportunity Services: "Mini-Agri-Business"	—	—	(62,000 [3]	(73,000 [3]	(124,000 [3]	(180,000 [3]
Services, and Sheltered Employment for Youth and Disabled Adults with Special Needs)	—	—	(40,000 [2]	(60,000 [2]	(80,000 [2]	(120,000 [2]
	—	—	(3,000 [4]	(7,000 [4]	(14,000 [4]	(21,000 [4]
II. Other Services						
1. Aid to Families in Economic Distress (Financial grant with casework services for multi-problem families)	745	—	1,400	2,100	2,800	3,500
2. General Assistance	26,641	—	52,000	78,000	94,000	130,000
3. Home Aide Service	2,320	—	4,000	6,000	8,000	10,000
4. Protection, Care and Placement Services of Children and Youth	6,796	—	12,000	18,000	24,000	30,000
5. Services to Students, Children and Youth with Special Problems	1,064	—	2,000	3,000	4,000	5,000
6. Services to Delinquent Minors	2,859	—	4,000	6,000	8,000	10,000
7. Rehabilitation Services for Special Groups and the Disabled	944	—	1,800	2,700	3,600	4,500
8. Substitute Home Placement for Adults with Special Needs	899	—	1,600	2,400	3,200	4,000
9. Disaster Relief	1,050,761	—	(All low-income victims needing assistance)			
10. Services to Cultural Minorities	19,586	—	38,000	57,000	76,000	95,000
11. Central Luzon Development Program	50,052	—	100,000	150,000	200,000	—
12. Services to Squatter Families	5,716	—	10,000	15,000	20,000	25,000

	FY 1970-71 ACCOMPLISHMENTS	FY 1970-71 TARGETS	FY 1971-72 TARGETS	FY 1972-73 TARGETS	FY 1973-74 TARGETS	FY 1974-75 TARGETS
III. Training, Research and Special Projects						
1. In-service training	790 [7]	20 [5]	40 [5]	50 [5]	60 [5]	70 [5]
	21 [5]	—	—	—	—	—
2. Special Training of DSW Staff	50 [7]	—	—	—	—	—
3. Foreign Training	67 [7]	—	—	—	—	—
4. Student Training	745 [7]	—	—	—	—	—
5. Research Projects	20 [6]	12 [6]	20 [6]	20 [6]	20 [6]	20 [6]
6. Special Projects	10 [6]	10 [6]	10 [6]	20 [6]	20 [6]	20 [6]
7. CITRUS Projects	10 [6]	10 [6]	20 [6]	20 [6]	20 [6]	20 [6]

[1] Couples
[2] Youths
[3] Families
[4] Individuals who are either disabled or with special needs
[5] Seminars
[6] Projects
[7] Participants

Initial efforts will begin in 23 Provincial Branch Offices, 23 Community Centers and 4 Vocational Rehabilitation Centers of the Department.

B. Social Welfare Research and Training Center

1) The National Training Center and Area Training Center

To bring the program to a national scale, staff training will be expanded. The National Training Center was established to systematize a program of seminars, workshops, institutes, and field instructions for all types of social workers. To accommodate field workers in the Visayas and Mindanao territories, training will be decentralized to area training centers in Cebu City and Davao City, respectively.

2) Regional Training and Research Center for Social Welfare in Asia and the Far East.

The First Asian Conference of Ministers Responsible for Social Welfare (September 1970) agreed to the establishment of a Facilities Center in Manila for the training of key social welfare staff (planners, administrators, researchers, supervisors, social work educators and other top level personnel in Social Welfare) in advanced methods. This Center will focus activities on research, training, and the production of relevant social-work literature. This Center shall be funded by contributions from the United Nations, the Frederick Ebert Stiftung Foundation of Germany and the various participating countries.

Financial Requirement

Program expenditures are allowed to increase up to 9 per cent per year. Negotiations, however, have been started for additional funding of the socio-economic advancement program. The proposed financial outlays and annual investment for the various programs are given in Table 20.2.

2. THE FOUR-YEAR COMMUNITY DEVELOPMENT PROGRAM

The program of the Presidential Arm on Community Development (PACD) is geared to socially and economically deprived communities found mostly in rural areas. The principal goals are to: induce socio-economic betterment, strengthen local institutions to facilitate the process of growth, and elicit popular interest in the development process.

The projects include improvement of agricultural productivity, socio-economic infrastructure, and manpower development. The projects are grouped into three programs: (1) Grants-In-Aid, (2) Joint Projects with other agencies, and (3) Purely Self-Help Projects.

A. Program of Grants-In-Aid

This program involves granting assistance in the form of processed materials for the construction of projects which are development-oriented. Priority is given to the following types of projects:

(a) Production and Income Augmenting

The program will support communal irrigation; make available farm machineries and equipment; improve techniques in fishing, livestock, and poultry production; and provide multi-purpose pavements or cement driers.

(b) Social and Economic Infrastructure

Projects here include the construction of multi-purpose health centers, school buildings, markets, bridges, flood and river controls, and feeder roads.

Pre-school Centers have elicited very enthusiastic response from parents, local governments, and private individuals. It is proposed that the number of Pre-School Centers be increased.

Table 20.2—SUMMARY OF ANNUAL FINANCIAL REQUIREMENTS FOR SOCIAL WELFARE PROGRAM, FY 1971-75
(In million pesos)

PROGRAM	ACTUAL EXPENDITURES FY 1971	FY 1972	FINANCIAL REQUIREMENT FY 1973	FY 1974	FY 1975
1. Family Welfare	2.50	2.73	3.01	3.28	3.64
2. Child and Youth Welfare	3.47	3.81	4.18	4.59	5.02
3. Vocational Rehabilitation	1.26	1.55	1.69	1.83	1.97
4. Training and Research	.69	2.87	5.47	8.57	12.29
5. Field Services	7.29	26.13	30.65	38.04	47.26
TOTAL EXPENDITURES	15.21	37.09	45.00	56.31	70.18

(c) Health and Sanitation-Oriented

Plans were made for the construction of artesian wells, the development of spring and other waterworks, and the construction of sewerage and drainage facilities.

A substantial yearly allocation is programmed to support the health services of other agencies.

(d) Pilot Projects

The support to pilot projects for urban community development will be continued in the next four years. A capital outlay of ₱2.9 million for that period is needed for the project.

B. Special Category Projects Undertaken in Cooperation with Other Agencies

1) Manpower Development of Out-Of-School-Youth

This program envisions the recruitment of out-of-school youth for free vocational training. Vocational schools will be requested to accommodate the recruits and, if possible, to expand their facilities to areas where the number of recruits warrant the establishment of vocational schools.

2) Export and Tourism Program

In connection with the objectives to expand exports and tourism, a beautification project with both government and private sectors coordinating will be undertaken in every province.

Projects for the development of new scenic, natural or historical places and for the improvement and maintenance of existing ones are also being contemplated.

To help the export industry, attention will be given to the following industries: shellcraft, needlecraft, woodcarving and loom-weaving. The project shall fall under the Grants-In-Aid Program.

3) Family Planning

In assisting the Family Planning Movement, the training programs will also feature family planning seminars dwelling particularly on the motivational educational aspects.

4) Cooperatives Development

The promotion of cooperatives in the barrios will be undertaken during the four-year period. The projects of cooperative organizations will be sponsored under the Grants-In-Aid program.

5) Cottage Industries Development

Training for skills in different crafts and the organization of industrial cooperatives will get stellar billing under this program.

6) Food Production

Food production activities/projects will highlight the following: animal dispersal, fishery development, and the Green Revolution program. Dissemination of information including training of barrio people shall be conducted in support of the program for food production.

7) Rural Electrification

Barrio development is often hampered by the absence of inexpensive electric power. The National Electrification Administration (NEA) will therefore be assisted in its efforts to establish electrical cooperatives in the barrios.

8) Applied Nutrition

The applied nutrition program is corollary to the food production scheme which includes diet-improvement in the barrios.

9) Volunteer Program

There has been an increasing rush of university students joining volunteer movements for community projects and activities. Sometimes students group themselves together to sponsor self-help projects at their own expense in order to gain manpower skills in the implementation and construction of community projects/activities.

There is a great need for an expanded implementation of volunteer activities and projects. An annual half a million pesos has been budgeted to form a four-year total of ₱2 million for this purpose.

There are from two to three purely self-help projects generated per one Grants-In-Aid project. These purely self-help projects have helped in increasing the production of rice and corn. Additional communal waterworks, irrigation facilities, barrio roads leading to the main highway, toilets with water-sealed bowls, waiting sheds, plaza benches, etc. are all constructed by the communities.

The contribution of the community to self-help projects in the form of local materials and labor averages ₱50 million a year.

D. Loans-In-Aid Program

About ₱2 million will be made available for this program. Loans will be made available to indigent communities for low-cost housing and agricultural equip-

ment purchases. This project will be self-liquidating in the sense that the original amount will be returned to the lending agency. But the profits and other benefits derived will accrue to the borrowers.

E. Field Training Program

An estimated 350,000 activities penetrating the whole country with 10 million participants in various programs like community training, orientation training, in-service, and information program are to be conducted. The necessary expense of ₱52,366,000 for this program will be funded from public and private contributions.

Personnel

At present, community development personnel totals 3,296. Of this number, 2,353 are fieldmen and 843 are administrative personnel.

As the community development program expands, more field personnel will be needed to manage and supervise the PACD activities. About 600 additional field workers will be needed both for rural and urban development. Hence, a step-up in the recruitment and training of more personnel over the four-year period will be needed. With these additional personnel, more areas will be covered and more people will be given the necessary assistance.

Financial Requirements

The annual financial requirements for both capital and operating expenditures from 1971 to 1975 are as follows:

	TOTAL	CAPITAL	OPERATING
FY 1971	₱10,350,000	₱18,200,000
FY 1972	11,000,000	19,240,000
FY 1973	16,000,000	19,800,000
FY 1974	21,000,000	20,370,000
FY 1975	26,000,000	20,960,000

The budget is expected to increase from about ₱30 million in 1971 to ₱47 million in 1975. These amounts do not include the value of the contributions of self-help projects which are very substantial in relation to the Agency's contribution.

Complementing the social welfare program, but not falling formally under its realm, are the foreign aid donations coming in the form of food items. Four cooperating social work agencies have been mobilized to undertake the distribution to indigent families and victims in disaster areas. Donations come in the form of milk, wheat flour, oats, wheat, vegetable oil, corn meals and others. The physical quantities of each commodity programmed for the next five fiscal years are summarized in Table 20.3 along with the total dollar costs of supply and shipment. The whole operation, which is known as the Voluntary Agencies Program (VOLAGS) under USAID sponsorship, will entail for the four-year period from FY 72 to FY 75 some $95.3 million. This should go a long way in relieving intermittent pressures on the government social welfare budget.

Table 20.3—COMMODITY REQUIREMENTS FOR FY 1971-75 UNDER THE PL 480 TITLE II FFP PROGRAMS

DESCRIPTION	REQUIREMENTS FY 71	FY 72	FY 73	FY 74	FY 75
A. U.S. Inputs (If Funds, In U.S.$ Thousands or equivalent)					
1. Food and Fibers (Shown in metric tons if not otherwise indicated)		(In Thousand Pounds)			
NFD Milk (shipped in 50-lb. bags)	10,610	6,432	7,213	8,353	10,575
Wheat Flour (shipped in 50-lb. bags)	10,565	12,654	43,573	43,111	42,648
Bulgur Wheat (shipped in 50-lb. bags)	21,013	41,282	48,761	56,551	71,746
Rolled Oats (shipped in 50-lb. bags)	8,858	10,994	40,846	40,425	40,005
CSM (shipped in 50-lb. bags)	8,978	13,263	94,897	93,737	92,576
Rolled Wheat (shipped in 50-lb. bags)	739	718	2,031	2,013	1,996
WSP (shipped in 50-lb. bags)	22	1,000	1,230	1,430	1,820
Vegetable Oil (shipped in 6-1 gal tin/can)	2,182	6,027	26,652	26,764	27,250
Cornmeal (shipped in 50-lb. bags)	1,000	—	—	—	—
Total U.S. Food and Fibers input by Weight	63,967	92,370	265,203	272,384	288,616
Estimated Total CCC Value ($000)	5,644	7,524	22,320	22,920	24,279
Estimated Ocean Freight ($000)	1,036	1,716	5,304	5,448	5,772
Total Landed Cost ($000)	6,680	9,270	27,624	28,368	30,051

PART V

Government Reorganization

CHAPTER 21

Governmental Organizational Reform

1. THE CONSTITUTIONAL CONVENTION

The whole organizational structure of government is now under critical study by a 320-man committee which enjoys nationwide representation. Collectively known as the Constitutional Convention, this delegation is entrusted with the responsibility of framing a new Constitution that would embody all the ideals and aspirations of Philippine society in the face of changing realities in the modern world. But more important, this new constitution will hopefully be one that will ensure more appropriate conditions for attaining these ideals, including those related to the achievement of rapid economic development.

The body has been convened on the premise that the first Constitution had not adequately served the needs of the nation. More strongly, the implicit contention is that the present Constitution is, in the first place, essentially incapable of fulfilling national ambitions. The possible reasons have been traced to certain provisions allegedly inimical to long-run public interest, and, conversely, to the lack of certain provisions that could hasten the developmennt pace.

In any case, the primary concern of the present Four-Year Plan document relates to the organizational setup of the executive machinery. In this connection, a brief precis of the final report submitted by the Reorganization Commission is herein presented. Referred to as the Reorganization Plan, the report concentrates on the executive branch of government.

The framework of the proposed reorganization falls within the terms of reference of the law creating the Reorganization Commission for the express purpose of instituting organizational and administrative reforms in the executive branch.

While it may be argued that, ultimately, it is the Convention which will decide on the final form of government proper to the Philippine situation, it is nevertheless held that the Reorganization Plan will in turn lend invaluable insights and assistance to any historic decision of the Constitutional Convention.

In any case, the Reorganization Plan affects only the executive branch whose structure may independently be assessed regardless of fundamental changes that will be instituted concerning the future relationships among the executive, the legislative and judicial branches of government.

2. GOVERNMENT REORGANIZATION

Under Republic Act 5435 as amended by Republic Act 6076, the Commission on Reorganization was specifically charged with the policy "to promote simplicity, economy and efficiency in the Government to enable it to pursue programs consistent with national goals for accelerated social and economic development and to improve the service in the transaction of the public business." In connection with this policy, the work of the Commission was guided by a number of specific and implicit constraints, which include the following:

(1) The "package" approach to reorganization had been stipulated. The President may make changes in the Plan before submitting it to Congress, but Congress would have to accept or reject **in toto** the Plan as submitted by the President. Therefore, the Commission had to maintain a balance and provide such improvements as would still be acceptable as a package to Congress.

(2) There were limitations of real resources available for the improvement of the Government system; more specifically, these included limitations on (a) human resources and (b) financial resources. The Commission took into account the level of competence existent in the government service today, and did not expect a sudden and dramatic improvement in the quality of government personnel through reorganization alone. At the same time, the Commission also noted the financial difficulties of the national government, and assumed further that no substantial inflow of new funds would be forthcoming, which in turn meant avoiding newly created units, including proposed corporations, which would very likely remain unoperational for lack of funds.

(3) The reorganization law specifically limited the courses of action available to the Commission on government-owned or controlled corporations, "within the limits of their respective charters". Given this all-embracing constraint, the Commission limited the changes to across-the-board policies and procedures, without touching on specific individual corporations.

The Reorganization Plan, which was prepared in accordance with the above guidelines and constraints, contains the following salient general features:

(1) A decentralization of the normal government to an extent felt necessary for improved administration, by (a) reducing the number of agencies directly under the supervision of the Office of the President, and (b) establishing ten uniform regional districts. Decentralization is to be carried out both in terms of geographical coverage, as well as in terms of increased delegation of authority within the individual departments.

(2) The optimum standardization of the organization and common operational activities of departments. Staff services common to all government agencies will be standardized into four services, namely: planning, finance and management, administrative, and, when necessary, technical services. The functions of each department will also be classified into staff and line functions; staff functions are to remain with the department proper or central office, while line functions will be delegated for implementation by department-wide regional offices.

(3) A clear identification of the planning function in each department or agency. The preparation and execution of national development programs will be facilitated by (a) merging the NEC and PES into a single planning entity and (b) instituting separate planning and programming units in the various levels of government, especially at the department level.

(4) A strengthened career civil service, primarily through (a) a single career undersecretary for each department, (b) the creation of a Career Executive Service covering assistant bureau directors up, with general administrative skills, and (c) a simplified three-tier structure for the civil service consisting of career executives, professional and technical staff, and a wider service scope.

(5) The generation of savings through several methods including the abolition, transfer of functions, and merger, of agencies. The maximum number of personnel that could be retained is 25% for abolished agencies and 50% both for agencies whose functions will be transferred to other agencies and for agencies which will be merged together.

In addition to the general features mentioned above which are common to the entire government organization, there are also a number of sectoral improvements and points of emphasis worth mentioning.

(1) The role of government planning in the development process will be emphasized through a two-tier arrangement involving (a) the merger of various existing agencies with planning functions into one body called NEDA with cabinet representatives from the national agencies concerned with planning, and (b) a higher nine-man body called the Economic Development Council to formulate general overall national objectives and policies for development, with the President as chairman, and the Secretary of Finance, the NEDA Director-General, three representatives from the Senate, and three representatives from the House, as members.

(2) A Department of Agrarian Reforms is proposed to emphasize the particularly crucial role of land reform at this point of national development.

(3) The interrelated process of development from the national down to the local levels is envisioned by the provision of development bodies (a) at the national level through NEDA, (b) at the regional level through regional development councils corresponding to the regional districts, and (c) at the local level through the newly created Department of Local Government and Community Development which includes both units formerly with the Office of the President and the Presidential Arm on Community Development.

(4) The policy formulating and adjudicatory functions of the executive branch of government on public utilities will be improved through the creation of five independent regulatory boards for land transport, air transport, water transport, communications, and power and waterworks, with supporting line bureaus to implement their policies.

The Commission established a policy of mentioning in the Plan all existing agencies in the executive branch of the Philippine Government, whether created by statute or executive order and whether abolished, retained, transferred, or attached.

The Reorganization Plan was presented in two volumes: (1) the reorganization plan proper which constitutes the legal document to be accepted or rejected by the Congress in toto, after changes which may have been made by the President; and (2) the supporting statements, charts, and tables.

The Plan reduces the number of commissions, boards, and councils from 254 to 181 or a 28.7 per cent cut; the number of bureaus from 80 to 71 or an 11.2 per cent cut; and the number of divisions from 1,109 to 725 or a 34.6 per cent cut. An overall savings

of about ₱100 million in personnel services alone is expected.

More specifically, the Reorganization Plan has 23 parts grouped into four general headings: administrative development, administration of economic development, administration of social development and general government affairs.

A. Administrative Development

1) Office of the President

It is proposed to free the President from unnecessary detail by (a) reducing the number of agencies reporting directly to him; out of some 150 offices now under the Office of the President, only 25 will be retained; and (b) decentralizing or delegating to department heads many matters now requiring presidential approval. Foremost among the proposals to provide the President with stronger technical and management support is the creation of a Development Management Staff; this Staff shall provide the President with an information resource base for policy making and serve as the Presidential expediter for development projects that encounter operational problems. There is also a plan to place the present Department of General Services, which is renamed General Services Administration, on a more professional efficient footing.

2) Departmental Reorganization

A general model for the organization of the departments is proposed. There shall be, in each of the Department, only one Undersecretary who shall be a career administrator.

Unless otherwise provided, the Department shall organize an integrated field service on a department-wide basis; the country is divided into ten regions with the regional director being responsible for departmental functions performed in his regional area. The bureaus shall, as a rule, perform primarily advisory and staff functions, but may exercise, in behalf of the department head, technical supervision over the regional offices. Moreover, there shall be a pool of staff services in the Department proper, namely: Planning Service, Financial and Management Service, Administrative Service and, when necessary, Technical Service.

3) Civil Service

Structural changes and innovations to strengthen the merit system and to provide the foundation for the development of qualified and effective men in the public service are being envisioned under the Civil Service. Noteworthy of these are: the conversion of the present single-headed Civil Service Commission to a three-man Commission; the decentralization of personnel functions to line departments, bureau and regional offices; the provision of more effective policies on personnel selection, promotion, discipline, and training; and the formation of a Career Executive Service. This Service, composed of well-qualified and experienced administrators, shall be given attractive salaries, classified according to rank, and be made to operate within a system which allows flexibility and mobility to enable the government to utilize their services and talents whenever they are most needed.

4) Revenue Administration

The Plan seeks to authorize the Secretary of Finance to organize units for the purpose of conducting investigations on an industry-to-industry basis. It also provides for the creation of a Committee composed of the Undersecretary of Finance, Deputy Commissioner of the Budget, and Undersecretary of Justice, to review decisions of the Commissioner of International Revenue on the compromise of cases involving ₱25,000 or more. Non-revenue functions of the BIR and Bureau of Customs are to be transferred to other agencies. This will enable revenue producing bureaus to concentrate on their primary task of assessing and collecting taxes. The BIR is to be reorganized by reducing its present 20 regional offices to 10 and by realigning the functions of the nine existing "departments" to five staff services. To develop a more professionalized and efficient work force, a Career Revenue Service is created among the professional and technical personnel of the Bureau of Internal Revenue and Bureau of Customs.

5) Budgeting and Financial Control

The proposal seeks to reorient the role of government budgeting towards the evaluation of actual performance in terms of explicit objectives and expected results, to ensure that funds are utilized and operations are conducted effectively, efficiently, and economically. There is also a view to revert to the general fund certain special funds to promote more flexibility in the programming of limited financial resources and to improve the financial position of the fund.

B. Administration of Economic Development

1) Economic Planning and Program Implementation

A number of important recommendations are incorporated here, namely:

(a) Integration of planning and programming functions in order that optimal use may be made of government resources, giving due recognition to: (a) the need for direct involvement of the highest political leaders of the land in economic decision-making and (b) the need for a closer link between plan formulation and execution.

(b) Creation of the Economic Development Council (EDC) composed of the President of the Philippines as Chairman; and the President of the Senate, the Majority and Minority Floor Leaders of the Senate, the Speaker of the House of Representatives, and the Majority and Minority Floor Leaders of the House of Representatives, the Secretary of Finance; the Director-General of the National Economic Development Authority, as members. The EDC will institutionalize the needed direct involvement of these high officials in economic planning.

(c) Creation of the National Economic Development Authority (NEDA) to be composed of a group of Cabinet members and other high-level officials, and a private sector representative. The Technical Staff of the NEDA shall also backstop the EDC; it shall be constituted by the merger of the Presidential Economic Staff, the technical staff of the National Economic Council, and the **ad hoc** bodies whose functions duplicate and overlap those of NEDA.

(d) Maintenance of the Presidential Development Budget Committee as a permanent body to serve as the institutional link between planning (NEDA) and budgeting (Budget Commission). This will assure that the annual budget is a faithful translation of the approved development plans in terms of annual fiscal programs for the government sector.

(e) Creation of the Presidential Investment Committee, with the NEDA Director-General as Chairman, which shall formulate and coordinate the investments of government financial institutions within the context of the approved development plan for the purpose of attaining maximum use of available resources.

(f) Establishment and maintenance of sectoral planning and programming units to complement and provide support for development planning undertaken at the national level.

(g) Maintenance of a decentralized but well-integrated system of government statistical activities. The coordination of the decentralized statistical operations can be strengthened through the transfer of the standard setting and coordinative functions of the present National Economic Council to the NEDA. There will also be a Statistical Advisory Board to serve as a medium for better coordination of statistical operations.

2) Regional Planning and Development

The proposal seeks the following:

(a) The promotion of the socio-economic development of the various regions within the country by providing the institutional framework for the conduct of regional planning and development within the context of aggregative planning at the national level and specific planning and programming at the local level.

(b) The creation of a regional development council for each of the ten administrative regions in which the country is proposed to be divided. The councils shall be broadly representative of local governments and sectoral departments of the national government operating in the region.

(c) The adoption of a policy that will provide the broad framework for the integration of development efforts in each of the ten administrative regions. Towards this end, there should be only one regional development agency for each administrative region that shall serve as the main instrument for plan implementation geared basically towards agricultural, mineral and industrial promotion and development in accordance with the priority programs of the national government and the regional plans adopted by the regional development councils.

(d) Pending enactment of the necessary legislation to carry out this policy, the existing regional, subregional, and provincial development authorities shall be attached to the NEDA or the appropriate department or agency, to achieve integration with national and sectoral plans, policies and programs.

(e) The abolition of the National Planning Commission and the transfer of its physical planning functions to the Department of Public Works, Transportation and Communications, and of its assistorial and coordinating functions on urban planning to the Department of Local Government and Community Development.

3) Agriculture and Natural Resources

The Plan seeks to reorganize the Department of Agriculture and Natural Resources to make it the primary policy, planning, programming, coordinating and administrative entity of the executive branch of government in the allied fields of agriculture and natural resources. Major recommendations in this direction include the following:

(a) To minimize duplication of functions and achieve economy, efficiency and effectiveness in development, the following bureaus are created:

i) Bureau of Forest Development — merger of Bureau of Forestry, Reforestation Administration and the Parks and Wildlife Office.

ii) Bureau of Plant Industry — merger of Bureau of Plant Industry and Bureau of Soils.

(b) To integrate all functions and activities aimed at agricultural and natural resources development under one department, the following offices are abolished: Abaca Developmennt Board, Small Farmers' Commission, Presidential Coordinating Committee on Social Justice and Agrarian Reform, Philippine National Commission on Freedom from Hunger Campaign, Committee on Agricultural Cooperatives Development, Committee on Wood Industries Development, Sugar Production Council, National Beautification and Cleanliness Committee, Committee on Cattle Industries, Executive Committee for Quezon City National Parks, and Cooperatives Coordinating Committee.

(c) Similarly, the following are transferred to the Department:

i) Agricultural Productivity Commission. It is renamed Bureau of Agricultural Extension and placed under the direct supervision of the Office of the Secretary.

ii) Agricultural Credit Administration

The latter which is a corporation is attached to the Department for policy coordination.

(d) Regional offices under the Department are strengthened to provide comprehensive and well-coordinated services in the rural areas.

(e) A Department of Agrarian Reform is created under the Office of the President to provide for a single agency to undertake a more effective and more meaningful implementation of the land reform program. The Department replaces the Land Reform Project Administration and the Land Authority which are abolished.

As a result of the above actions, savings in personnel appropriations amounting to ₱22.9 million can be realized, and the number of divisions under the various units of the Department will be reduced from 103 to 54.

4) Trade and Tourism

The Department of Commerce and Industry is to be restructured and renamed the Department of Trade and Tourism to emphasize the thrust towards generation of foreign exchange through export trade and tourism. Accordingly, the following recommendation is proposed: create a Bureau of Industrial Promotion, a Bureau of Foreign Trade, and a Bureau of Domestic Trade.

Tourism, as a distinct activity, is specifically mentioned as a function of the DTT, and a Philippine Tourism Commission is created under the Department.

5) Public Works, Transportation and Communications

The provisions toward the streamlining of these sectors are:

(a) The consolidation and integration within the Department of all governmental functions and activities pertaining to the planning, production, operation and maintenance of infrastructure facilities and services involving public works, transportation and communications, including the regulation of public utilities involved in these functional areas.

(b) The allocation of functions and operations relative to the construction and major maintenance and repair of infrastructure facilities to two line construction bureaus: Bureau of Highways and Airports and Bureau of Public Works. This will involve absorption by the Bureau of Highways and Airports of the construction functions relative to runways from the present CAA and the absorption by the Bureau of Public Works of functions of the present Bureau of Buildings and Real Property Management relative to major repair and maintenance of public buildings. The Bureau of Public Works will absorb the functions of the present CAA relative to construction and major maintenance and repair of buildings and similar structures, as well as electrical and mechanical works and related facilities in airports.

(c) The creation of five specialized regulatory boards: (1) Board of Land Transportation, (2) Board of Water Transportation, (3) Board of Air Transportation, (4) Board of Communications, and (5) Board of Power and Waterwork. The specialized regulatory boards will exercise regulatory and adjudicatory functions over public utilities involved in their respective jurisdictional areas.

The Public Service Commission and the Civil Aeronautics Board are abolished and their adjudicatory functions are to be absorbed by the appropriate regulatory Board. The Radio Control Office is abolished and its regulatory and adjudicatory functions relative to radio communications are transferred to the Board of Communications.

(d) The centralization of the management of construction equipment depots and repair shops, as well

as of material testing and services, in the Project Executive Service of the Department. All functions relative thereto exercised by the different bureaus and agencies of the Department are accordingly transferred to said service.

(e) The creation of a Bureau of Water Transportation which shall be basically responsible for the enforcement of laws, rules and regulations on maritime shipping. The Bureau will absorb the functions of the Philippine Coast Guard relative to the enforcement of rules and regulations on maritime shipping.

(f) The Land Transportation Commission is transformed into a Bureau of Land Transportation and shall absorb the enforcement functions of the abolished Public Service Commission as these pertain to the enforcement of rules and regulations governing the franchises of land transportation facilities.

(g) The present CAA is transformed into a Bureau of Air Transportation and will absorb the enforcement functions of the abolished CAB relative to air transportation.

(h) The Bureau of Coast and Geodetic Survey is transferred from the Department of National Defense to the Department of Public Works, Transportation Communications.

(i) The Bureau of Posts is retained but reorganized internally to effect reduction in the number of divisions, as well as to provide for a regionalization of mail operations.

(j) The Bureau of Telecommunications shall absorb the enforcement functions of the abolished Radio Control Office. The Bureau shall operate government telephone and communications facilities to service government offices, as well as supplement private facilities in the sectors where needed. It shall maintain backbone networks and withdraw in areas which are sufficiently serviced by the private sector.

(k) The abolition of several **ad hoc** bodies concerned in the fields of public works, transporttaion and communications and the transfer of their functions to the appropriate units in the Department.

(l) The attachment of appropriate government-owned or controlled corporations to the Department.

(m) The abolition of the Presidential Advisory Council on Public Works and Community Development and the transfer of its functions relative to public works and community development, respectively, to the Department of Public Works, Transportation and Communications and the Department of Local Government and Community Development. Its functions of conducting continuing studies on local economic conditions and preparing updated local atlases are transferred to the appropriate regional development councils.

6) Government Corporations

The following recommendations are included in respect of government corporations:

(a) Coordination and integration of the operations of government-owned or controlled corporations to conform with stated national objectives, policies and programs.

(b) Government withdrawal from ownership or control of corporations which are no longer pioneering and which can be undertaken by private enterprise except those involving governmental functions.

(c) Government shall not engage in any economic venture of a proprietary nature except in pioneering areas where private enterprise is either unwilling or unable to engage.

(d) Prohibition against creation or operation of corporations engaged in subsidies.

(e) Abolition of the Office of Economic Coordination and attachment of government corporations and financial institutions to the NEDA or to the executive departments with which they have allied functions for purposes of policy coordination and integration with sectoral programs. This relationship shall consist of the following:

i) Participation in the government board of the Corporation, where permitted by its Chapter, either as chairman or member or an official of the executive department to which the corporation is attached. The official must have a rank not lower than a Bureau Director, except the Secretary;

ii) Promulgation by the executive department of general policies to serve as framework for the internal policies of the corporation. Internal operations shall be left to the discretion of the corporate executive officers; and

iii) Submission to the NEDA or executive departments concerned of audited financial statements by corporations.

(f) Corporations which are satisfactorily managed shall enjoy autonomy, except in matters of policy and program coordination and close supervision and control of those uneconomically, inefficiently or inffectively managed.

(g) Corporations with operating deficits shall be placed under the following constraints: (a) operating

and capital budgets become subject to examination, review and modification and/or approval by the supervising department and (b) an increase in any form of compensation to board members, officers and other personnel shall not be permitted.

(h) A management audit, at the instance of the supervising department or NEDA, shall be initiated in any corporation when there is an indication of mismanagement.

(i) Establishment of a Corporate Management Board, under the administrative supervision of the NEDA, composed of five Governors who shall sit in the governing boards of ten or so government corporations.

C. Administration of Social Development

1) Education

The Office of the Secretary of Education is to be strengthened by the creation of the administrative and staff services including a Planning Service which shall also serve as the secretariat of the National Board of Education. The Bureaus concerned with education are restructured by levels, namely: (a) general education and (b) higher education for both public and private schools. As such, there will be a Bureau of General Education which shall be responsible for pre-elementary, elementary and secondary general and vocational education. To achieve efficiency and economy, and in line with decentralization, regional offices of the Bureau are to be established to oversee the provincial and city offices located within the region. A Bureau of Higher Education is created to take care of higher education matters.

All cultural functions performed by various offices are to be integrated in the Department. As a result, the National Institute of Arts and Letters and the National Historical Institute, which shall absorb the functions of the National Historical Commission, Archives, and other similar offices, are created.

2) Science and Technology

The National Science Development Board will have more flexibility in its operations by providing it with a lump sum appropriation and exempting its technical and scientific personnel from WAPCO and Civil Service rules and regulations.

Additions to the NSDB complex are the Philippine Textile Research Institute and Commission on Volcanology from the National Research Council of the Philippines; and the Metal Industry Development Center and the National Water and Air Pollution Control Commission from the Office of the President.

3) Labor, Manpower and Youth Development

The emphasis in the reorganization of the Department of Labor is on the change in the traditional concept usually attributed to the Department as a regulatory body primarily concerned with the enforcement of labor laws and regulations. The new thrust is for the Department to play a vital and positive role in the effective development and utilization of human resources. The abolition of the National Manpower and Youth Council together with its Secretariat, under the Office of the President, and the transfer of its functions to the Department; the abolition of the Office of Apprenticeship, the National Apprenticeship Council, and the Office of Manpower Services; and the creation of the Bureau of Manpower Training and the Bureau of Employment Service, are recommended for the integration of this new role in the Department.

4) Social Welfare

To strengthen the Department of Social Welfare, its functions will have to be re-oriented toward positive social welfare service. The traditional approach of giving dole-outs to indigents shall be changed to provide the families and individuals with skills on a self-help basis.

(a) The Bureau of Family Welfare and the Bureau of Child and Youth Welfare are retained. The former shall concentrate on preventive social service functions which seek to prevent unusual conditions faced by individuals or families from degenerating into a crisis, while the latter shall emphasize youth development and youth affairs and shall confine its activities to remedial and protective social service functions to restore to normal conditions, or bring back to a state of health, clients who have special needs and problems.

(b) The Bureau of Vocational Rehabilitation is renamed Bureau of Rehabilitation to emphasize its role of providing not only vocational training but also social and other rehabilitation services.

(c) A Bureau of Assistance is created principally to provide prompt relief, rehabilitation and welfare services in the event of natural calamities or disasters.

The Department shall provide, as soon as is feasible, for ten regional offices in order to fully expand its social welfare activities to the grass-roots levels.

5) **Health**

A restructuring of the Department of Health will emphasize the development of a general and integrated health care program rather than the existing disease or calamity-oriented health care program, so as to bring health and medical services closer to the people, especially in the rural areas. The Office of the Secretary will be provided with the necessary administrative and staff units which shall assist the Secretary in developing a comprehensive health program.

The existing six bureaus of the Department are reduced to three. The four bureaus performing preventive and curative medical and health services are abolished, and their functions integrated with the proposed Bureau of Health and Medical Services. The Bureau of Research and Laboratories and the Bureau of Quarantine are retained.

Recognizing the impact of the growth of population on the economic development of the country and fully realizing the problem that may arise, it is proposed that the Commission on Population be retained in the Office of the President.

6) **Local Government and Community Development**

The proposal seeks the creation of a Department of Local Government and Community Development which shall be the primary policy, planning, programming, coordinating and administrative agency of the executive branch of the government through which strengthening of local autonomy and improvement of local government administration shall be achieved. The Department shall have under it the Bureau of Local Government, Bureau of Community Development, and the Bureau of Cooperatives Development.

D. **General Government Affairs**

1) **Foreign Affairs**

Proposals that are geared towards strengthening the role of the Department of Foreign Affairs in foreign policy planning, upholding its leadership in the conduct of foreign relations, and expanding its role to include participation in socio-economic development are being considered. Thus, a Planning and Research Staff to take over the functions of the Chief Coordinator and Special Assistants in the Department is envisioned. This Staff will integrate the studies and reports of the line units as basis of foreign policy planning. For once, a highly specialized body will be institutionalized in the Department to provide substantial technical support to the Secretary for foreign policy planning and formulation.

To insure coherence and unity in the conduct of foreign relations, it is proposed to place all attaches, during their tour of duty, under the administrative control and supervision of the Chief of Mission. In order to broaden the role of the DFA from its traditional political orientation to a more active participation in the field of socio-economic developmennt, all U.N. National Committees (except the UNESCO National Commission) are abolished without prejudice to the authority of the DFA to create such interdepartmental **ad hoc** committees as may be necessary to formulate and implement programs on U.N. matters. In all such **ad hoc** committees the vice chairman shall be from the DFA. The administrative staffs of the abolished U.N. National Committees shall be transferred to the Office of U.N. and International Organizations of the DFA to serve as the secretariat for all U.N. matters.

For economy and simplicity, a model staffing range is provided for Class I and Class II Foreign Missions and for Class I and Class II Consulates General.

2) **National Security**

The Plan aims to better utilize the defense establishment for socio-economic development, while retaining its traditional role of guarding against external aggression and internal subversion. To this end the composition of the Technical Advisers to the National Security Council is revised to include the Director-General of the NEDA. An Office of Civil Defense is created in the DND to assume the present functions of the National Civil Defense Administration which has been proven to be ineffective.

All veterans services are consolidated and integrated under only one agency — the Philippine Veterans Affairs Office under the DND.

For economy, the NICA is restructured into only five main divisions instead of the present 13 divisions or so. The National Board of Intelligence is reconstituted to include as member the Chief of the Policy Planning and Research Staff of the DFA.

3) **Law Enforcement**

The creation of a National Police Commission with the present Police Commission as the nucleus is proposed. The Commission is vested with adjudicatory powers relative to police discipline and benefits, subject to judicial appeal.

4) **Administration of Justice**

The staff services of the Department of Justice proper is to be strengthened. A provision for a more professionalized and effective career service for fiscals

comes within the purview of this. The Deportation Board is abolished, and its functions transferred to the Board of Commissioners whose decisions on deportation cases shall become final and executory after 30 days from promulgation, unless the President orders otherwise. Also abolished are (a) the Anti-Dummy Board, with its investigative function absorbed by the NBI and its prosecution function transferred to the Department of Justice; (b) the Code Commission, the pertinent function of which is merged with the U.P. Law Center; and (c) the Public Service Commission, the pertinent functions of which are transferred to the appropriate regulatory boards under the Department of Public Works, Transportation and Communications. The Office of the Agrarian Counsel is to be transferred to the Department of Agrarian Reform.

5) **Regulatory Administration**

The establishment of a system of centralized recording, publication and dissemination of administrative rules in order that the public may be promptly informed of their contents and effectivity is put forward. Toward this end a Filing Office is created and attached to the National Library for administrative purposes; its functions will include the compilation, indexing, publication and dissemination of administrative rules adopted by each regulatory agency. As part of the scheme for centralized recording and publication of rules, all regulatory agencies are required to file with the Office a copy of each rule adopted by them including rules existing on the effective date of the Plan. Each rule will be adopted after twenty days from the date of such filing. With respect to rules effective prior to the approval of the Plan which are filed within one year from the date of such approval, they shall not threafter be given sanction as against any party or person.

NOTE ON THE DRAFTING OF THE FOUR-YEAR DEVELOPMENT PLAN, FY 1972-75

The drafting of the Four-Year Development Plan for the period FY 1972-75 was occasioned by the issuance of Memorandum Circular No. 424 on January 12, 1971 by the Executive Secretary, by authority of the President. The Circular created an Inter-Departmental Task Force for a continuing evaluation and updating of the Four-Year Development Plan of the Philippines, headed by the Chairman of the National Economic Council. The Task Force was charged with the duty of undertaking a continuing evaluation of the progress of implementation of the Four-Year Development Plan for the Philippines and its updating. (In the Circular, ninety-one representatives from 41 agencies were named. Of course, as is usual in this kind of undertaking, many others were also involved.)

Various government agencies and institutions were represented in the Task Force through their representatives. Aside from the involvement of the National Economic Council (NEC), the following departments and offices were involved: the Presidential Economic Staff (PES), the Board of Investments (BOI), Department of Agriculture and Natural Resources (DANR), Department of Commerce and Industry (DCI), Department of Education, Department of Finance, Department of Health, Department of Public Works and Communications, Department of Social Welfare, Land Authority, and the Budget Commission; and, among the government financial institutions, the Central Bank, Development Bank of the Philippines (DBP) and the Social Security System (SSS).

Significant contribution was made by the NEC Chairman's Consultants from the School of Economic of the University of the Philippines.

Offices, including those under departments or agencies already mentioned, which were called upon to help in the drafting of the Plan through their members in the Task Force, are: the Bicol Development Company, Bureau of the Census and Statistics (BCS), Bureau of Public Highways, Bureau of Public Works (BPW), Bureau of Telecommunications, Civil Aeronautics Administration (CAA), Commission on Government Reorganization, Food and Nutrition Research Center, Infrastructure Operations Center, Joint Legislative-Executive Tax Commission (JLETC), Laguna Lake Development Authority, Mindanao Development Authority, National Electrification Administration (NEA), National Food and Agriculture Council (NFAC), National Irrigation Administration (NIA), National Land Reform Council, National Manpower and Youth Council (NMYC), National Power Corporation (NPC), National Science Development Board (NEDB), National Waterworks and Sewerage Authority (NWASA), People's Homesite and Housing Corporation (PHHC), Population Commission, Presidential Arm on Community Development (PACD), Presidential Survey Commission on Education, Private Education Assistance Committee, and three units of the University of the Philippines, namely, the College of Agriculture, and Institute of Planning and the Institute of Small-Scale Industries (ISSI).

Lastly, some segments in the private sector contributed their share (when necessary) together with government entities during the process of committee work on the Plan.

GLOSSARY OF ABBREVIATIONS

ACA	Agricultural Credit Administration
ACCFA	Agricultural Credit and Cooperative Financing Administration
ADB	Asian Development Bank
AGLF	Agricultural Guarantee Loan Fund
AID	Agency for International Development
APC	Agricultural Productivity Commission
BAECON	Bureau of Agricultural Economics
BF	Bureau of Forestry
BIR	Bureau of Internal Revenue
BOI	Board of Investments
BPI	Bureau of Plant Industry
BPS	Bureau of Private Schools
BS	Bureau of Soils
BTTI	Board of Travel and Tourist Industry
BUTTEL	Bureau of Telecommunications
BVE	Bureau of Vocational Education
CAA	Civil Aeronautics Administration
CAO	Cooperatives Administration Office
CB	Central Bank
CSC	Civil Service Commission
DAR	Department of Agrarian Reform
DANR	Department of Agriculture and Natural Resources
DBP	Development Bank of the Philippines
DND	Department of National Defense
EDC	Economic Development Council
EPP	Export Priorities Plan
FAO	Food and Agricultural Organization
FTZA	Free Trade Zone Authority
GSA	General Service Administration
GSIS	Government Service Insurance System
GTS	Government Telephone System
IBRD	International Bank for Reconstruction and Development
ICAO	International Civil Aviation Organization
ILO	International Labor Organization
IPP	Investment Priorities Plan
ISU	Irrigation Service Unit
MERALCO	Manila Electric Company
NACIDA	National Cottage Industry Development Administration
NAWASA	National Waterworks and Sewerage Authority
NEA	National Electrification Administration
NEC	National Economic Council
NEDA	National Economic Development Authority

NIA	National Irrigation Administration
NFAC	National Food and Agriculture Council
NHA	National Housing Authority
NHC	National Housing Corporation
NSDB	National Science Development Board
NTEI	Nationwide Telecommunication Expansion and Improvement
PACD	Presidential Arm on Community Development
PES	Presidential Economic Staff
PHHC	Philippine Homesite and Housing Corporation
PNR	Philippine National Railways
POP-COM	Population Commission
PWO	Parks and Wildlife Office
RA	Reforestation Administration
RCA	Rice and Corn Administration
SEC	Securities and Exchange Commission
SSS	Social Security System
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNICEF	United Nations International Children Emergency Fund
USAID	United States Agency for International Development
WAPCQ	Wage and Position Classification Office
WHO	World Health Organization